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CLAREMONT COLLEGE READING CONFERENCE

Twenty-Second Yearbook

1957

GENERAL CONFERENCE THEME

Reading: The Process of Making Discriminative Reactions.

SPECIAL CONFERENCE THEME

Reading Is Creative Living

Jointly sponsored by CLAREMONT COLLEGE and

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Claremont College Reading Conference
Twenty-Second Yearbook 1957

Introduction

Claremont College Annual Reading Conference celebrated its silver anniversary during the 1957 session. The permanent thesis of this conference is that *reading is the process of making discriminative reactions*. Annual themes vary emphasizing special aspects or particular problems pertaining to instruction in or the application of that broadly conceived process. The 1957 special theme was that **READING IS CREATIVE LIVING**.*

The yearbook opens with a discussion of the idea that "Reading is Creative Living." Spencer distinguishes between the *reception* of stimuli and the *perception* of meaning and significance. Stimulation is received through many sensory processes. Meaning is created through the process of perception which is involved in all reading behavior. Hence, reading is creative living.

Harry Wood, an artist, shows how both the artist and the consumer of art products utilize the reading process in their respective activities. In "Creative Living Through Painting" he points out the scriptural nature of great works of art. In agreement with Dewey, Wood asserts that **ART** is the experience the spectator has as he reads a work of art. The actual process of reading a painting is, at the perceptual level, strikingly similar to the process of reading a printed word account. Four steps or levels in picture reading are discussed. Unfortunately the cost of color reproductions of the paintings precluded their use in the yearbook.

This conference recognizes that reading is performed

*Other annual themes and yearbook titles are listed in the appendix.

with data from any or all of the senses. Commonly major concern has been shown for visual reading. Aural reading has ranked second in regard. Most of the other sensory processes have been given relatively little consideration within discussions of the reading process or within instruction programs for developing reading abilities. Hence, the article by Mr. Hirsch, an engineer, on "Tactile Reading" is timely in its import. Communication through tactile reading makes use of basic abilities which are essential in human behavior.

That the brain is involved in the reading process everyone knows, but *how* the brain functions as one reads is much less well known. The discussion by Dr. Holmes of "The Brain and the Reading Process" indicates the importance of knowing the properties and operations of the brain as various perceptual acts are performed. Reading the brain in order that we may facilitate reading with the brain clearly needs more attention than it has received.

Much attention has been given recently to the education of brain injured children. Mrs. Wood's account of how "Brain Injured Children Learn to Read Their Environment" illustrates the wisdom of including the whole of one's reading in an instructional program rather than confining concern so exclusively to abilities for the reading of printed words.

Oral reading is commonly associated with a vocal reaction to printed words. However, there seems to be no good reason for restricting the term so narrowly. Dr. Thompson's contention that "People Art for Talking" is well taken when one recognizes that a major portion of communication is accomplished orally and aurally. These are important aspects of a Balanced Reading Program.

Reading music as an aural and kinesthetic experience naturally precedes and creates meaning and need for the

reading of music notation, Mrs. Landeck points out. "Reading Music in the Language of Emotion" deals with many basic ideas for the development of attitudes and abilities for music reading as distinguished from the reading of mere music notation.

Children with hearing commonly experience aural and oral language in advance of their learning how to read visually the corresponding printed word symbols. However, deaf children and hard-of-hearing children often lack such experiences. Teaching them how to speak and how to read printed words involves different procedures from those used with children having normal hearing. Mrs. Taylor discusses many aspects of this problem in "Reading is Creating Learning for the Deaf Child."

Mrs. Fielder gives a parent's point of view regarding "Motivation for Reading." She shows how broadening the customary idea of what reading is, helps in bringing perspective to the development of interest in and abilities with reading.

Another procedure for initiating and motivating reading is described by Dr. Van Allen. His account of a program for "Initiating Reading Through Creative Writing" as used in certain schools has many stimulating implications. The process of leading students to the thresholds of their own minds rather than bidding them to enter the house of their teacher's wisdom is the essence of reading in the sense which this conference uses that term. Creative reading demands creative expression. Creative observing followed by creative writing gives meaning and significance to the act of consuming the expressions of others.

"Four Boys and Their Boxes" by Priscilla Neff tells specifically how creative observing and creative expression

removed the curtain which obstructed the boys' reading of printed words. In the urgency to develop abilities to read printed words, there is a common failure to recognize that such reading is secondary and dependent upon other more primary forms of reading.

So-called "Selective Reading" has received a great deal of attention in recent considerations of school reading programs. Mrs. Dodson's account of "Special Literature for the Gifted Child" tells how a school system has made provision for stimulating interest in printed word reading and developing wider choices from the field of literature.

The projective factors in reading are often overlooked. Too often reading is thought of as "*getting* ideas from the printed page" rather than as "*creating* ideas" under stimulation from that source. Professor Sturman in discussing "Reading and the Creative Life" refreshingly points out how the individual projects himself and his experiences into his reading.

Libraries are important for the implementation of book reading activities. They are too often taken for granted. Mr. Holt offers much food for thought in his discussion of "The Impetus of the Library Region on Reading." He suggests ways in which the library services can be made more pertinent and more effective.

This is the twenty-second volume of a series of year-books produced by the conference with the hope that readers of the books will broaden their ideas of the nature of the reading process, and that they will correspondingly recognize many applications of the process rather than concentrating their concern so exclusively on the reading of printed words. Meanings are created by each individual reader, hence Reading is Creative Living.

Reading Is Creative Living

PETER L. SPENCER, PH.D.

*Professor of Education—Claremont College
Director of Claremont Reading Conference*

We feel privileged to welcome you to this, the twenty-fifth, annual session of the Claremont Colleges Reading Conference. Those who created the conference and those who have joined in its sponsorship feel honored by your presence and your interest. Twenty-five years is a short span of time when measured historically, but we who have served thru those twenty five years recognize that the period is long when measured in terms of personal and individual experiences.

It seems particularly appropriate that at this twenty fifth anniversary we should be giving special attention to the creative aspects of reading. Creative imagination is the source of the conference offerings. Hence creativity holds a special place in our regard.

Reading and the development of abilities to read have been of major concern thruout the existence of our country. However, it has not always been clear that such was the case. Much of the concern has been focused on a relatively small segment of human regard. Reading has characteristically been associated with responding to printed words. This is an association which our conference questions.

Illustrative of the narrow association is this incident told of President Hutchins of Berea College. Dr. Hutchins had been entertained in the home of a backwoodsman. Upon his return to Berea, President Hutchins typed a thank-

you letter which he sent to his former host. However, the intended act of courtesy was not received in the spirit in which it was performed. The woodsman's feelings were hurt. He felt belittled. He looked at the printed page with chagrin and said, "Why did he send me readin'? I kin read writin'."

This simple incident reveals some important points. Reading takes on various meanings. The most prominent association with reading is that it is a special stimulus, viz.; *printed words*. Hence, the printed letter was "readin'." However, there is an awareness that other things are also read, e.g. "Writin'." And, there is suggested an apparent scale of values for the various applications of reading. Those who can "read writin'" are in a class above or at least apart from those who can merely "read readin'."

Such an idea has potentialities for further development. It suggests that reading may be used either as a noun or as a verb. As a noun, reading may symbolize a certain thing, e.g. *printed words*. As a verb, it refers to a process, a mode of behavior.

Differentiations of that type help to clarify thinking. As a noun the application of the term can be modified to refer to many things, e.g., printed word reading, spoken word reading, visual reading, aural reading, etc. The adjective modifier is used to designate the nature of the stimulus which is classified as reading. As a verbal expression, reading may suffer modification likewise. Its tense may change. It may be modified adverbially. Hence reading reading may become a very complex task.

If one is concerned solely with the process, the stimulus becomes a matter of secondary importance. On the other hand, if one is concerned mainly with the thing being read,

the process may have less importance. Differentiations such as these were the creative basis for our conference. While others have been mainly concerned with printed words as stimuli; our attention has been more concerned with the behavior process. We have been less concerned with the stimulus which may have evoked the behavior. This is why our basic premise is and has been thruout the conference sessions that **READING IS THE PROCESS OF MAKING DISCRIMINATIVE REACTIONS**. No stimulus is mentioned because none is necessary for our purpose. Behavior is responsive. When behavior occurs, stimulation can be assumed. The reading process is essentially the same no matter what provokes the behavior. There is sensing, perceiving, responding, and evaluating in all cases. By naming a stimulus the description of the process is necessarily restricted.

Failure to mention a stimulus in our basic definition does not mean that we have no concern with stimulation. We believe that the *discrimination* utilized in making one's behavior apt and satisfying is the area of behavior which has the greatest potentiality for modification and therefore for growth. Consequently, we are mainly concerned with increasing the discrimination and making it more effective.

Stimulation is essential. But stimulation, per se, rarely determines specifically what a humane response will be. Responses directed by reading (discrimination) characteristically reflect humane controls and discipline as compared or contrasted with undisciplined, intuitive, more human reactions. Educating or in our vocabulary *reading* consists in changing human behavior into humane behavior. In other words creating humane beings from human beings.

Stimulation is essential for reading. The human body is equipped with many sense organs and with respective sen-

sory processes. The effective functioning of these processes and organs is certainly important, but it is limited in its modifiability, and in its nature. For example, it is important that the eyes function well in the reception of light stimulation. But, that which we perceive is rarely, if ever, what the eye receives. The tree that exists several feet away is not the agent which directly activates the eye when the tree is seen. Energy waves affected by the tree enter the eye and activate the retina. The nervous energy produced within the retina and transmitted to the visual center in the brain is not the same as the tree or the light affected by the tree. Similarly, it does not seem likely that imagery utilized in perceiving the tree is merely electro-chemical energy acting in a mechanically determined pattern.

Perceiving is creative. Receiving may, on the other hand, be predominately mechanical. But that which is perceived by one reader may be altogether different from that which another reader perceives. In reading, any particular stimulus is likely to be affected in perception by multitudes of imagery which are not in the external world even remotely associated with the particular stimulus which was received. Consequently, we assert with confidence that reading is creative living.

We create our perceptions. Consequently we create our ideas, our ideals, our aspirations, our goals, and even our dilemmas. None of these can be transmitted ready made from one person to another. Ideas and ideals are personal things. They are possessed only by their creator.

Probably this is what Dewey had in mind when he said, "Democracy must be born anew with each succeeding generation." We cannot legislate democracy. We cannot inherit it. We must create it. And judging by the conditions which

prevail in many parts of our country we have not been very successful in *perceiving* democracy either. We err when we think that perceptions are commodities which can be transplanted from one who created them to others who possess them not. Ideas are not found in books. Ideals are not attainable by osmotic processes comparable to those used for attaining vitamins or calories. We cannot consume the products of that as we can consume the products of industrial processes. We must do our own thinking, our own perceiving, and we must do our own concluding. Creativity is essential for our survival and for our progress.

It is well that we come to recognize the necessity for creativity. Without such recognition there is a tendency to treat creativity as being freakish behavior, as something either unusual such as a special talent or as being something "screwy" and to be avoided. The artist who produces a great work is considered to be creative. Whereas the parent who produces a well adjusted capable offspring is not given comparable recognition. A writer who expresses an idea beautifully and aptly will likely be termed creative. But the cabinet maker who produces a comparable expression with wood and iron may be only a "skillful laborer." It is our belief that all are creative.

Of considerable interest to this conference is the great movement for developmental reading which has taken place in industry. For want of a better name it has been called "Brainstorming". It consists of a particular application of the reading process in which the participants are urged to use "creative imagination" with their "feet off the brakes" in attacking a problem of common concern. A foundation designated as the Creative Education Foundation has been established which actively sponsors this specialized reading

program. Industrialists, engineers, and those engaged in commerce have participated in the program in large numbers. They have found that it pays to emphasize the creative aspects of reading at least in certain types of situations found in their occupations. They are not inhibited by the term creative. They recognize that creative imagination is the source of all the progress that the human race has achieved. Creativity is a fundamental component of the reading process.

Modern ideas of the educative process also stress the importance of creating meaning. The committee on instruction and learning of the National Society for the Study of Education presented the idea that, "We must change the classroom procedure in our schools from that of recitation hearing to a procedure of laboratories for learning." This involves the developing of problem situations in which experimentation, observation, hypothecation, invention, discovery and evaluation are needed in order to arrive at acceptable solutions. Creativity is to play a major part. Memory in the older usage for that term will be played down. Citation will replace re-citation.

Essentially, what the committee proposed is that instructional concern and procedures utilize what this conference has identified as the reading process. They are stressing creative imagination rather than emphasizing sheer memory. Memory is important, but one cannot remember that which one never experienced. One must first create. Then one must retain, recall, and apply what one has created. This very often leads to a re-creative process.

Changing receptive sensitivity into perceptive sensibility is a creative process. It involves the development of understanding, of meaning and the determination of the signifi-

cance of what has been created. Being told is not the same as having learned. Having seen or heard is not the same as having realized meaning or significance.

Perceiving is sensing with meaning. Meaning is not a property of the stimulation. Meanings are created rather than sensed in the customary connotation of that term. Meanings are created from present sensory data, recalled experiences, and the creative influence of purposes and aspirations. Someone has pointed out that "everyone is a product of his future." This seeming anomaly suggests an important possibility. If it is true, we should pay more attention to the future as we read our educational programs. There can be little doubt but that what one has experienced is an established part of him, but it may be that we have given too little concern for what one is becoming. The emphasis upon the past gives the impression that life is a process of fleeing or of smug complacency. The future remains to be created. Here is one's real opportunity, one's real challenge.

Words are both a help and a hazard to humane development. Words are symbols of ideas. Words are not ideas, however. This constitutes their hazard. Words are somewhat easier to accomplish than are ideas. Hence they may often be made to serve in the place of ideas. That situation is aptly characterized by the words of a famous negro character described by Cohen in the *Saturday Evening Post*, viz. "You sez words but they don't mean anything."

Words are symbols of ideas. And when effectively used they aid the producer or his readers to recall and to project the ideas in certain relationships which under favorable circumstances can lead a reader to create ideas new to him but which are in essence similar to those which the writer or speaker had in mind.

For example a story is told that walking with a blind friend one hot summer's day, Einstein remarked that he wished they might have a cool drink of milk.

The blind friend remarked, "Cool and drink I know, but what is milk?"

Einstein replied, "Milk is a white liquid."

"Liquid I know" said the blind man, "but what is white?"

"White is the color of the swan's feathers," said Einstein.

"Feather, I know, but what is a swan?" asked the blind friend.

"The swan is a large bird with a curved neck," Einstein replied.

"Bird and neck I know, but what is curved?" queried the friend.

Einstein then sensed the futility of sheer verbal communication.

He took his friend by the arm and holding the arm straight, he said, "This is straight." Then bending the wrist to form a curve he guided his friend's hand along the curved segment and said, "That is curved."

"Oh! Thank you so much", said the blind man, "*Now I know what milk is.*"

The incident not only illustrates how tenuous verbal associations can be, but it also discloses how we must depend on different senses in order to develop perceptual understanding.

Oral sounds aurally read were not adequate to bring forth the idea of milk's being a white liquid. Resort was had to tactile and kinesthetic sensing in order to establish a primary basis for the secondary cue or symbol for white. This is a procedure which at this conference we designate as *primary reading* as contrasted with *secondary reading*. Primary reading refers to the reading of objects and processes directly. While secondary reading refers to reading symbols which are representations of the things or processes.

Primary reading is necessary for the establishment of ideas. But for some reason this fact is frequently ignored. There is still extant the untenable idea that "for the first four years in school the child's task is to learn to read, and that thereafter he reads to learn." This concept has done untold harm to education and to the development of valid and functional programs for instruction in and thru reading. The "barking at words" advocated by Flesch and others of similar convictions is not reading in the sense that ideas are being developed. That is an instance where words are considered primary and what they symbolize is held to be of lesser importance. It is a case of "You sez words but they don't mean anything." Attention to word analysis and to composition and grammar is necessary, but its value will certainly be increased and achievement with it expedited if meaning and significance is leading the learner to pursue those studies in order to aid him with his use of word symbols. Creating an awareness of need and a desire to satisfy that need are important aspects of reading development.

Much of the attention which as been given to developmental reading has dealt with peripheral matters. This is natural, because treatment of sensory processes is easier than is the treatment of perceptive, creative processes. It is

easier to measure a deficiency in refraction in the eye than it is to determine what the seer can or will do with the light when it is refracted properly. It is relatively easy to determine how many fixations a reader makes as he reacts to a printed line, but it is not so easy to get at the creative effect which sensing the words produces in the reader's mind. It is easier to measure the discrimination which a reader may have for pure tones than it is to determine what he can do with speech and particularly with speech which involves personal qualities.

It is easy to restrict the occurrence and recurrence of words in a passage to be read, but it is less easy to determine how the passage will affect the reader or what he will make of it. We can do much toward controlling the size and form of type, of leading and of format and contrasts. But it is not so easy to make sure that these factors are major influences in developing either the desire to read the printed material or ability to comprehend it. Most of the things with which we have been concerned are peripheral. Reading is internal, perceptual, and creative. This does not suggest that our efforts have been wrong or that the activities in which we have been engaged are futile or misplaced. If what has been done had not been done, it would be necessary to do it. What we are pointing out is that a truly creative concept of reading takes us far beyond the present approaches. To the extent that they facilitate stimulation and the reception of stimuli they are helpful. But perceiving is the creative center in which the significance and meaning of that which has been received will be determined.

In previous conference sessions we stressed the need for balanced programs of reading. Balancing involves the use of all the senses as well as the inclusion of many kinds of situations. The story is told of a passerby who became intrigued

by the odors which came from a bakery. The smell of the freshly baked bread and pastries was most pleasing. So the man stopped and breathed the odors in. In language of this conference he read olfactorily. The baker accosted the man and demanded payment for the use of his product. The passerby refused to pay, pointing out the odors were permitted to flow freely thru the air and were therefore available to anyone. The baker argued that the man had deliberately stayed within the odor region and had intentionally consumed the smells. He called a policeman who when he had heard the stories decided that the passerby had truly and intentionally consumed the baker's product and should therefore pay for the privilege. Whereupon the passerby took a coin from his purse showed it to the baker then he threw the coin on the pavement making a ringing sound. He picked up the coin and asked the baker whether he had heard the coin ring. The baker admitted that he had. Then the man said, "I have paid for the smell of your cooking with the sound of my coin." This illustrates the interdependence of the senses and how one type of reading compensates for another. Until we use all of the sensory avenues in our reading provision, and until we meet the entire range of experience needs of our learners, we have not truly balanced our reading programs.

As we pursue the program as provided in this conference session, it is our hope that we will rededicate ourselves to the task of developing truly balanced programs for reading and that we will think broadly and creatively. There is much to be learned from the study of the idea that reading is creative living.

Creative Living Through Paintings

HARRY WOOD

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A great work of art or literature is essentially scriptural. It contains within itself all the necessary seeds of truth. From the flowering of these seeds in our thoughts, feelings, and actions come perfected lives. Thus paintings may form a foundation for creative living.

In our times *verbal* forms of scripture have been more widely trusted and studied than have the non-verbal ones as sources of life truth. Reading a written message has been thought of as a more accurate and a more complete means of discovering a true way of life, than, for example, oral transmission of ritual scripture, or the ritual sculpture of Gothic cathedrals.

Even literary works of art were for a long time not accepted as guides for creative living unless they were self-consciously allegorical like *Pilgrims Progress* or the *Divine Comedy*. To be sure it was an easy step for most people to canonize Dostoyevsky for the *Brothers Karamazov* or Somerset Maugham for his *Razor's Edge* or Thomas Mann for his *Magic Mountain*. These were books in which the heroes were not only men, but also, obviously, symbols of Mankind. But many people balked at first at the thought of searching for life-guidance in the bloody peepshow of Hemingway's *For Whom the Bell Tolls* or O'Neill's collection of putrescent backroom specimens in *The Iceman Cometh*.

Yet today the bulk of informed criticism grants Hem-

ingway, O'Neill, and such figures as Thomas Wolk, James Joyce, and T. S. Eliot prophetic status.

In the realm of non-verbal communication this process of seeking out and adapting for one's own guidance the symbolical meaning of works of art lagged a hundred years behind literature. The addiction of art to realism, prior to the coming of the camera was the major reason. Meaningful symbolism was drowned in acres of Dutch houseware, willow trees against the sunset, and clotheshorse portraiture.

Later, however, with the popular acceptance of psychoanalysis, and scientific recognition of art as a diagnostic and therapeutic tool, the search for symbolism in art once more aroused interest. Today as in the middle ages, it has become as important to discover the hidden meaning in a painting or a statue, as to "read" its manifest content.

The universal spread of non-objective and abstract art with its avowed distaste for narrative or literary elements, intensified this search. After all, if you can't read a story in a picture how can you read the picture at all? Everywhere people began to ask this question.

Today I want to show you some of the answers that have emerged. This is a sample of how works of art, like scripture, may serve as focal centers for the great thoughts, feelings and actions that make creative living.

This is what we mean by "reading" pictures. At this reading conference it is especially appropriate to remember John Dewey's wise analysis: He says that what we call Art is not in the original artist, nor in the work of art itself, but in the *experience* the spectator has when he looks at the work of art.

When you start learning to "read" pictures*, as in learning verbal reading, you usually begin with the simple nominative function. You merely ask the picture to name things. "This is a hat. This is a man. This is a woman."

Next you add vocabulary, first adjectives, then verbs to relate the nouns meaningfully. "This is a mischievous, frowzy dog. This is a large, black hat. The topheavy hat overwhelms the horse-faced man. The man looks devoted, dead-serious, and embarrassed. The woman is modest, submissive and in an interesting condition."

As we add vocabulary we find that our power to observe closely has been increased. We begin to identify bits of experience in the picture with experience of our own. We begin to "live" the picture slightly. But, unfortunately, this is where most people stop. If the anecdotal material in the picture is remote from their own experience, or if something in it makes them feel uncomfortable or embarrassed, like our topheavy friend here, they quit looking.

Those who persist in learning to read the picture, however, as if they were looking up meanings in a dictionary, find that a little historical analysis opens up the meaning of the picture tremendously, allowing them to relate it to their own experience world. This little picture,¹ for example, is called "The Arnolfini Wedding." It was painted by the Flemish Artist, Jan Van Eyck in 1434, as we know from his signature here in Latin. The words "Johannes Van Eyck fuit huic," and his own tiny self- portrait at his easel in the convex mirror on the back wall tell us this.

The signature, the self-portrait, and the mirror all point

*Refer to pictures on pp. 33-36.

to the historical purpose of the picture. It shows the Genoese cloth-merchant, Arnolfini, with the horsy Italian face, who plied his trade in Holland. We see him being officially married to a bride who is a native of his adopted Dutch home. Thus all his Catholic friends and relatives back home in Italy may learn that, even though he has fallen among blond protestants, he is still honestly united in the bonds of true Christian matrimony. The signature of the artist serves as that of a notary public witnessing the ceremony.

This also explains several other features of the picture. The pregnancy was a welcome mark of fertility and honor among the good Dutch *haus fraus*. Arnolfini felt sure his Italian friends would take delight in this. The dog in foreground was to assure them that the anticipated child was his—since the dog, under his latin name *Fides* (from which we get *Fido*) stood for Faithfulness. Since the artist depicts the dog facing the woman, we may be sure it was her pet, and her husband's proud symbol of her fidelity.

The curious shoes which the husband has taken off are also a symbol which careful "reading" can unlock. Often painters in the still largely illiterate 15th century, used the discarded shoe as a sign that whatever was taking place was to be construed religiously. This stemmed from the Old Testament incident in which the Lord advised Moses before the burning bush—"Take off thy shoes. Thou stand'st on holy ground." Thus the shoes were to reassure Arnolfini's doubting relatives that this marriage was not just a hated civil ceremony, nor a mere arrangement of convenience, but a true and proper rite, sanctified by religion.

Now, you may say, this kind of picture-reading is all very well for those who know their history, or who have time to spend looking it up. But what about those who just

want to read a picture for pleasure, as one would pick up a book? Is there some way they, too, can approach such a work of art?

I believe there is. I believe that all you have to do, with or without historical background, is to pry your eyes and your mind open and *keep looking*. If the work of art is great enough, it will wholly reveal itself to you. The means of unravelling its messages are built into it. It translates itself. It bears its dictionary built-in, in its related shapes, colors, and ideas.

Take this small painting called "The Music Lesson"² by the little Dutch master, Terborch as an example. It doesn't matter at all whether we know it was painted more than 200 years later than the Arnolfini Wedding. We can still approach it with interest and understanding. In the semi-darkness of a snug Dutch music room, we see a 17th century strawberry blond taking a lute lesson from an impolite-looking music master (He keeps his hat on in the house!) who evidently thinks she sounds like a whole orchestra, for he waves a baton a few inches from her nose. A bored terrier curls up nearby, probably not to show the faithfulness of the musician in this case, but perhaps only to indicate that her music is not good enough to keep him awake or bad enough to make him howl.

Is this trivial little story all there is to this painting? If so, it hardly qualifies as a guide to any deep spiritual truth. But let's keep on reading it.

On closer observation we notice a curious thing: The girl is not the heroine of her own picture! The real heroine of the picture is neither the girl, nor her dog, nor her teacher, but the *silk of her skirt*. The painter has given this

the strongest possible emphasis. The way he designs and paints its folds and the shimmering lights on its surface and its rich texture, describe that piece of silk with such mastery that to this day Terborch is famous as one of the two or three greatest silk-painters in world history.

No one has to tell us this. Soon it becomes obvious as we look at the picture that the real reason for the dog is to contrast his fur with the velvet of the lady's gown, the ermine of her collar, the shiny varnish of the cello, the broad-cloth suit of the music master. All of these in fact are placed there to give us the full flavor of the centerpiece, the herotexture, the silk. The painting is a visual glossary of textures. More than at any other period of history, even including the silk-loving 18th century, the Dutch little masters knew how to express their love of silk in their art. Since a great part of the fabulous wealth of that little country was based on manufacturing or selling cloth, it is easy to understand how such art arose.

And now we begin to sense the truth behind such a painting. It is to show us through our eyes that "*getting the feel* of *THINGS* is meaningfully beautiful in itself. After we have really "read" such a painting, our lives thereafter are enriched. Every time we see a piece of silk, or fur, or even the shiny surface of a new Chrysler we may respond more deeply and appreciatively because Terborch taught us how to "read" textures by putting our sense of touch to work through our eyes. It is the same "song of matter" that the Buddhist mystic learns by staring at a lotus blossom. For us a painting may serve as a similar focus of creative thought.

Compared to this form of enrichment, the little narra-

tive of the music lesson or the curious facts of the historical life of Terborch are unimportant.

The first lesson, then, for one who wishes to learn to read pictures in order to live more creatively, is to *keep looking* until the truth of the picture unfolds itself.

The second lesson, is to *make comparisons*, allowing one picture or form to feed or shed light on another.

For example, here is a painting by another little Dutch master, Jan Vermeer of Delft. Let's compare it with that of his contemporary, Terborch. When Vermeer looked at this "Milkmaid"³ he did not need to drape her in silk to see her beauty. To him the hero of the picture was not the shape and texture of any particular object but the LIGHT. See how light moves quietly through the casement window like honey, touching with dazzling glory, all the simple objects of the kitchen. A loaf of bread becomes a casket encrusted with jewel-like salt crystals. An earthenware pitcher becomes a ring of light through which a flood of liquid gold pours. After a little study the beauty of these simple objects strikes us with such impact that we find them taking on almost luminous significance. They might almost be, indeed, the bread and wine of a simple but reverent household communion. See, too, how the rough homespun of the milkmaid's bodice and the starched linen of her headdress, when glorified by the light, become a garment worthy of a queen! Not only this artist, Vermeer, but many others through the centuries have restored our enjoyment of the simple things of life by enriching and refreshing our visual experience of everyday objects.

One such artist still causes me some embarrassment. Years ago I spent a summer in Provincetown as an art stu-

dent. My room in a Portuguese fisherman's house was miserably dingy. Oatmeal-colored wallpaper, a sleazy, black, cambric cloth instead of a closet door, a broken pitcher on a rickety wash stand, and gray woodwork! I was glad to escape each day into the bracing Cape Cod air.

The following winter in a gallery I passed by a picture⁴ which stopped me in my tracks with a strange sense of familiarity. I read the name of the artist: Niles Spencer. He was the painter who had lived in my Provincetown room before I occupied it. Instead of a cracked pitcher, he had seen the wonderful singing form of a pure white vessel gracefully opening like a flower in front of a contrasting black cloth. The wall had become a rich yellow ochre, the dingy woodwork, a luminous blue green. For a whole summer I had missed the beauty he found in these things. The magic eye of the true artist had taught me that there was hidden beauty where I had seen only ugliness. By learning to "read" his picture, I have been able ever since to approach the commonplace, with reverent anticipation, knowing that beauty will leap forth as soon as my eyes are receptive. This, I believe, is one aspect of creative living.

So far I'm sure you're all with me. But suppose I confront you with this "Nature Morte au Guitare"⁵ by Picasso. The colors clash hideously. Even naturally beautiful shapes like goblets and guitars have been distorted into cruelly vicious angles. The design of the picture splits mercilessly in half. Beside a dish of rotting fruit is a shockingly inappropriate object—a big black cigar!

Where is the "beauty" in such a painting?

How can one "read" any scriptural truth in this on which to base creative living? This is surely worse than Eu-

gene O'Neill's barroom pimps or James Joyce's Leopold Blume!

To learn to "read" such a picture we must take a third essential step—We must learn to read the *feelings* or emotional contents as well as the intellectual content.

Picasso's vulgar black cigar gives us the clue, exposing itself here in the sacred precincts of Art. Violently Picasso shows us that in today's world, when the men-with-the-money-and-the-revolving-cigars dominate the art market, the gilded frame, is not only twisted out of shape, but empty. Where we formerly had great music, now we have squeaking guitar players. Where we formerly drank the sacred wine of inspiration from the chalice of the arts, we now gulp from a shattered goblet, sharp as a dagger, only bitter brown poison. Yesterday's luscious fruits from Art's horn of plenty, have now withered, rotted, and soured in a scanty dish. Truly a "Nature Morte"—dead nature—a still-life.

By thus "reading" the deep feelings which this great artist embodied in his picture, along with its actual objects, we get the same kind of scriptural urge toward renewed creative living that came in olden times from the stirring denunciations hurled by Jeremiah, or Dante or Jonathan Swift.

In Charles Scheeler's still life called "American Interior"⁶ I come to the final step which I believe necessary to learn to "read" pictures. This is to pursue the quest for meaning beyond the surface to the symbol. *To move from surface to symbol* requires re-reading, or, I should say more accurately re-re-reading, each time bringing to bear new associations from your own experience.

In Sheeler's painting we soon discover several "themes"—the circle and the right angle, for example. Repeated over and over they give us the flavor of New England austerity and rectitude that henceforth enriches our enjoyment and understanding of these Puritan virtues.

In Rembrandt's painting "The Student"⁷ by studying the relationships of the objects in the room and the distribution of light, we eventually see it as the great 17th Century master's testament of faith in humanism, that is, in Man's power to find his way to ultimate value through rational knowledge. Like most great geniuses, Rembrandt leaves us with an open question at the end of our search for meaning in this picture. For here, in the midst of one of the most materialistic cultures the world has known—that of the Dutch bourgeoisie of the 17th century—he shows us the chair of meditation empty (but ready for occupancy!) and the candle of the inner light unlit (yet standing on the table to be lit when the outer light fails.)

EL Greco's great picture called "San Ildefonso"⁸ shows how another great painter gave graphic expression to this inner light. We see the saint looking up as if the divine fire had just descended through his eyes and head from above. It flows down through his sleeve and at the moment captured by the artist, is about to flood out through the quill point into written form in the book. To show us that this inspiration is like a flame of the spirit, El Greco counters this downward movement with the upward surge of the fire's reflections on the red silk table cloth. In this veritable furnace of ecstasy, the saint is being consumed.

Tchelitchev, illustrator of Stravinsky's "Firebird Suite"⁹ has not only given us the down-plunging motion of the falling bird, and the updraft of the flames which consume



1. *Arnolfini Wedding* by Jan Van Eyck



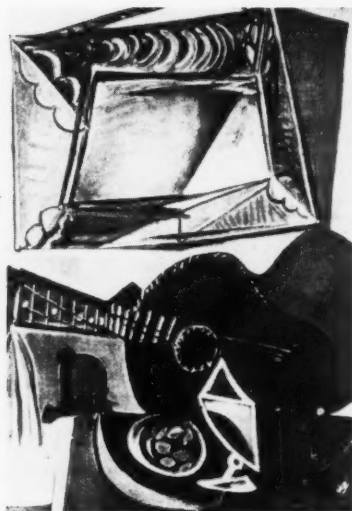
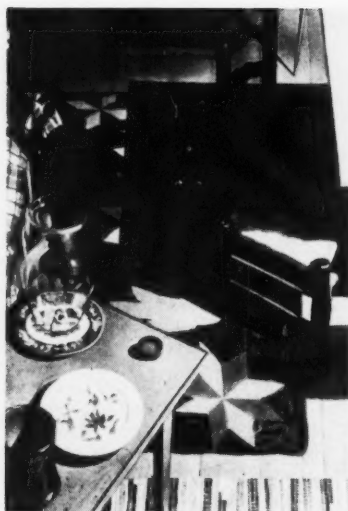
2. *The Music Lesson* by Terborck



3. *Milkmaid* by Vermeer

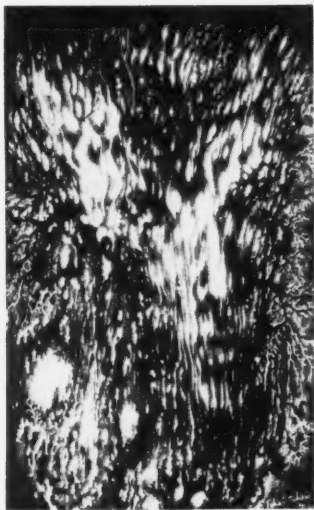


4. *Still Life* by Niles Spencer

5. *Nature Morte au Quatre* by Picasso6. *American Interior* by Charles Sheeler7. *The Student* by Rembrandt



8. *San Ildefonso* by El Greco



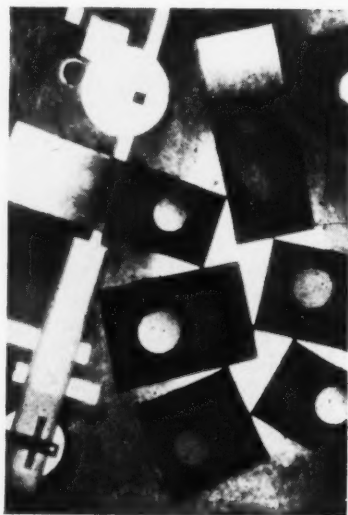
9. *Firebird Suite* by Tchelitchev



10. *Pointed and Round* by Kandinsky



11. *A Painter* by Daumier

12. *Third Class Carriage* by Daumier13. *Sunflowers Against a Blue Background*
by Van Gogh14. *Dark Edges* by Bauer

the ever-renewing phoenix, but also the motionless face of the human spectator-listener, transfixed eternally against the cosmic void.

Tchelitchev thus teaches us that in "reading" pictures in the 20th century we must learn to give multiple meanings to every symbol. Note the parallel here with Joyce's *Finnegans Wake* or Hemingway's double entendre of the fisherman and the Christian in *The Old Man of The Sea*.

Kandinsky's "Pointed and Round"¹⁰ gives us the opportunity to try to "read" a picture which at first glance seems to have no subject matter—no story—to get us started.

In such a situation, I suggest one simple rule of procedure: give close attention to any element in the picture and ask yourself, "What does it remind me of?" Like the analyst's free-association technique, this soon leads to the unwinding of whole sequences of meaning and enrichment.

Here we find Kandinsky establishing a powerful and dynamic system of thrusts and counterthrusts composed of triangle and circles and other shapes, drawn from the world of art, music, and the solar system. Dominating the whole is the great black palette (also like a mason's trowel) which seems to assert Kandinsky's faith that the *Artist* can maintain a dynamic equilibrium in a conflicting universe.

Reading such a picture deeply, all the way from surface to symbol, leads from a mere collection of assorted shapes, to a profound affirmation of the God-like role of the creative artist in the universe.

Daumier in this quick sketch called "A Painter"¹¹ conveys the same truth in a more traditional, but very intense manner. We see the artist working far into the late twilight, beating back the slanting darkness with his light. His dark

eye-sockets, his half open mouth, his rapidly moving hand, his posture, all speak of the fervor of his devotion to Art. Even death, symbolized by the crumbling skull on the wall, waits while he works.

In three very different ways the three artists with which I wish to conclude all say the same thing.

Daumier's "Third Class Carriage"¹² can be read first as a story, then as a visual-theme painting. The story it tells is that of a charming moment in the midst of a family traveling on the timeless train. The visual theme in this case is the globe. We see it most emphatically in the round head of the infant. Then it is repeated in the grandmother's food basket, the young mother's breast, the brother's head, and even in the bowler hat of the somewhat superfluous father, sitting with his back to his family. It is Daumier's way of saying that the perpetual cycle of life on this brief journey (third class!) continues ceaselessly.

Vincent Van Gogh says the same thing in his famous "Sunflowers Against a Blue Background."¹³

Even though we see the light embodied only in coarse, stickerylooking sunflowers, they rise at their noonday peak in full splendor. Yet when they blacken and wither, they still writhe with life. In this crooked earthen vessel, Vincent seems to be saying, "Sunflowers *never* die. Life persists. And especially what persists is the beauty of Light as symbolized in these flowers."

No wonder thirteen million prints of this gloriously ugly picture have been sold in America!

Rudolph Bauer's "Dark Edges"¹⁴ uses a 20th century vocabulary to convey the same message.

Instead of people or sunflowers we see symbols of the measuring devices of modern science—thermometers, transits, microscopes, slide rules, plus and minus signs; slides of microscopic sections of cells or phases of the moon—all balanced with the utmost precariousness on each other's corners. One slight puff would collapse this scientific house of cards in which we live! But the artist says it will not happen. Behind the evil black cards he paints a glow of hopeful light. His picture can be read like any true scriptural revelation as a kind of dissolution of universal fear in the larger framework of universal Faith.

So it is that the great artists speak to us if we only learn to read. The moment we turn our thoughts and feelings receptively toward their pictures, their energies pour through forms and colors into our lives.

And, like many a great book, pictures have the power to transform our lives if, after thinking them through, and feeling them through emotionally, we express their meanings in changed patterns of behavior. When we "read" them profoundly in this way we are actually living meaningfully. And this I take to be the essential truth of living creatively.

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Tactile Reading

JOSEPH HIRSCH

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There have been several attempts to have the deaf "hear" through their skin sensitivity. The methods proposed considered dividing *speech sounds* into multiple-frequency channels and communicating these frequency channels tactually. Many difficulties existed in the attempt to have the tactual sense interpret the spoken wave forms. The success of these methods depended upon the skin's sensitivity in distinguishing these complex wave shapes (Ref. 1, 2, and 3).

This paper describes a basic system for direct tactile reading and consists of a single apparatus whereby the five fingers of the "speaker" are on sensitive vibration—sending keys; and correspondingly, the five fingers of the "listener" rest on sensitive receiving diaphragms. A duplicate system allows the "listener" to become the "speaker". An elementary prototype employing a single frequency has been built. It is possible to send 31 symbols of information by employing a coding using a single frequency transmitted singly or in combinations by the five fingers. A more elaborate system using multiple frequencies is presently being built.

At present, there exists no successful apparatus by which a person both deaf and blind may carry on satisfactory continuous communication with another deaf and blind person located at a remote point. Even in the case of persons not deaf and blind and possessing all of their senses, present systems of long-distance communication are sub-

ject to certain limitations, particularly with respect to the time lag between the creation of an idea in the mind of the transmitting operator, and reception and subsequent action upon the idea by the mind and body of the receiving operator. For example, intercommunication systems on aircraft are frequently not able to transmit in a sufficiently short period of time the urgent signals which must be sent from the ground observer or controller. On take-offs a pilot has to focus alternately on a nearby object, such as an instrument panel and then on a distant object such as the runway or horizon. If he is called upon to make a response while under these conditions, his reaction time will be increased by the time required for the sight accommodation and convergence as he changes focus in addition to the simple reaction time required for him to fix his eyes successively on the same object. His reaction time will be *decreased*, however, if information, such as attitude correction is transmitted by tactile stimuli. This series is only one example of the many areas where the heavy burden on the visual and auditory senses can be considerably diminished by the use of tactile stimuli.

Much of our information about the body's immediate surroundings comes to us through the medium of the skin. A comparison of the skin's sensitivity to vibration with the sensitivity of the sense organs of sight and sound indicates the existence of many similarities in certain basic considerations. For example, frequency, intensity, and duration are factors common to light, sound, and vibratory tactile stimuli. The eye sees from the wave length of violet, 400 millimicrons, to that of red, 700 millimicrons. The human auditory response to frequency falls between the range of 20 to 20,000 cycles per second. The skin's sensitivity to vibration, i.e., amplitude threshold as a function of frequency of vi-

bration, is somewhere in the range of 10 to 8,000 cycles per second. The curve of vibration amplitude threshold as a function of frequency is a good deal like the auditory threshold curve, but is displaced toward the lower frequencies. Discrimination between "tactile" frequencies is fairly efficient. With practice one can recognize 400 cycles per second, for example, as different in frequency from 420 cycles per second. People can feel as little as 0.00004 inch double amplitude of vibration when the frequency is between 100 and 500 cycles per second. In the higher and lower frequencies (above 1000 and below 60) the amplitude must be increased to 0.00015 inch to be felt. There are three stages of language and two intermediate translations between the outside world and the subjective reception of information:

- (1) *Acoustic* — symbols taken as physical vibrations in the air.
- (2) *Phonetic* — symbols associated with the various phenomena in the inner ear.
- (3) *Semantic* — transfer of symbols into an experience of meaning.

The substitution of the tactual sense for the auditory sense has been attempted by Norbert Wiener who has been using a method outlined by the Bell Telephone Laboratory in which sound is converted into tactile sensations, a device by which the deaf might learn to "hear" through skin vibratory sensations. A device similar to the Vocoder divides the sound into five bands of tactile stimuli. In the case of the deaf person the phenomena associated with the middle ear (phonetic stage) is missing, but is in this instance by-passed by using the sense of touch. Similarly, in reference 3, Gunter Rosler

presents research on a 10-finger vibrator in which spoken sounds are divided into 16 channels and then "compressed" into 10 channels for transmission to the fingers. His studies also present an exhaustive literary survey in vibration and tone frequency. In addition, devices have been conceived to translate brightness gradients into tactile impulses. The method presented in this paper (Ref. 4), delineates a basic system for the study of communication through the sense of touch. This system is different in that it uses a coding of vibratory tactile stimuli. The coded signals are sent and received by the finger tips and sending and receiving can be simultaneous.

It should be noted that in teaching speed reading the reader is taught to read entire phrases and the greatest loss in reading time is due to the movement of the eye in going from word to word and line to line. This particular loss of time is avoided in the proposed system in that the fingers rest on the five vibratory diaphragms, and *immediate* reception is accomplished.

A model of the basic system has been built. In order to simplify construction, only one frequency was employed. By using this simple system employing door-bell switches and earphone diaphragms, learning time for the alphabet was noted and found to be relatively short. Coding of the alphabet was achieved by using combinations of tactile stimuli on the five fingers. By utilizing this method with one frequency, 31 symbols are possible. A pressing of the key by the thumb of the sender sends a signal to the thumb of the receiver. This represents the letter A. A pressing of the key by the index finger of the sender sends a signal to the index finger of the receiver. This represents the letter B. A signal sent to the middle finger represents the letter C, to the ring

finger the letter D, and to the little finger the letter E. A simultaneous pressing of the thumb and index finger keys represents the letter F. ($A+B=F$); and similarly

$$\begin{array}{llll} B+C=G & C+D=H & D+E=I & A+C=J \\ A+D=K & A+E=L & B+D=M & B+E=N \\ C+E=O & & & \end{array}$$

Simultaneous pressing of three keys provides:

$$\begin{array}{ll} A+B+C=P & C+D+E=U \\ A+C+D=Q & D+A+B=V \\ A+D+E=R & E+A+B=W \\ B+C+D=S & E+B+C=X \\ B+D+E=T & A+C+E=Y \end{array}$$

And the pressing of four keys simultaneously:

$$A+B+C+D=Z$$

(The above coding was an arbitrary choice; since that time several coding methods have been proposed which would improve the above choice considerably.) With two frequencies 637 symbols are possible, and with three frequencies, 4,945 symbols.

The electrical circuitry necessary for achieving multiple frequencies need not be complicated. It is desirable that the five fingers rest upon the sending and receiving diaphragms for speeded communication, thus avoiding the loss of time entailed in moving the fingers to a separate set of buttons. Multiple frequencies may be achieved by varying the depth to which the sending buttons are pressed. Another method suggested to achieve multiple frequencies is by use of a re-iterative system. It should be noted that with the

use of only three frequencies almost 5000 symbols are possible, and a basic English could be used where words could be transmitted on the five fingers corresponding to the varying combination of the three frequencies. A speeded method of communication might thereby result. Emphasis can be achieved as in voice communication by variation of the intensity (amplitude) or duration in pressing the respective buttons. At present, a prototype model employing two frequencies is being completed by The Ramo-Wooldridge Corporation. It is also intended to use this proposed model at the John Tracy Clinic in their research work with the deaf in the following:

a. *Reinforcing learning of lip reading:*

Those sounds accounting for almost 66% of usage in the phonetic alphabet have low visibility ratings.

b. *Speech learning and improvement in speech:*

By developing rhythm in speech through tactile communication.

c. *Acquiring language concepts.*

Dr. Alfred L. Larr of the English Department at U.C.L.A. is also in the process of constructing a similar model for the purpose of a preliminary investigation of language based on tactile stimuli. Even for those possessing all of their senses a coding could be successfully developed using multiple frequencies which would provide a speeded method of communication. A simple transmitter and receiver can be built for short range communication (10 miles) within a large city area at reasonable cost; and the deaf, thereby provided with a teletac, which serves for tactile communication much as the telephone serves for communication with sound.

There has been comparatively little basic research performed in tactile reading. Who knows, someday the decibel (a measurement of sound intensity) may have a tactile companion—the "decitac".

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The Brain and the Reading Process

DR. JACK A. HOLMES*

This, the 25th Reading Conference at Claremont College, has taken as its general theme the slogan: "Reading is the Process of Making Discriminative Responses." As teachers and specialists in the field of reading, ever searching for greater understanding of the child and deeper insight into the reading process, we are, sooner or later, forced to ask the question, "Just *how does the brain* of the child learn to discriminate and appraise the symbolic meanings behind the printed page in order that it may *direct the child* to make those discriminating responses we deem so necessary?"

In 1936, Dr. J. M. Nielsen⁹ critically analyzed all the clinical and neurosurgical evidence available in the field of agnosia, apraxia, and aphasia. Convinced that *cortical localization* was indeed a fact in human beings, Nielsen worked out the dynamics of a system of cerebrofunctional relationships which, for the most part, accounts for the fact that different aspects of language are lost when different parts of the brain are injured.

Scientists, in general, however, have been slow to accept Nielsen's brilliant work. There are several clear-cut reasons for this extreme caution; four of the most important are as follows: (a) Historically, the concept of cerebral localiza-

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Professor J. A. Holmes, while on sabbatical leave from the University, has spent the past year working as a Research Fellow, under Professor J. M. Nielsen, M.D., National V. A. Consultant in Aphasia. The writer wishes to thank Mrs. Milfred McKeown, Chief of the Aphasia Clinic, V. A. Hospital, Long Beach, for the many courtesies she and her staff have extended to him this past year.

tion is linked with Gall and the pseudoscience of phrenology—those early attempts to adjudge the extent of a person's abilities by measuring the bumps on his head! (b) Karl Lashley⁸, just seven years prior to Nielsen's publication, had cast doubt on all notions of cerebral localization when his careful experiments demonstrated that rats did not use any specific area of the brain in acquiring habit-perfection when learning how to run mazes. (c) Kurt Goldstein's³ attempt to interpret aphasic phenomena in terms of Gestalt psychology. And finally, (d) because the study of aphasia is the most difficult part of neurology, many scientists, initially interested in the field, turned to the more rewarding and perhaps more glamorous areas of neurology, psychiatry, and psychology.

The incidence of penetrating brain wounds, however, increased steadily during the Second World War and the Korean Action; and, therefore, increased interest in the study of aphasia became a necessity. A great deal of research now goes forward in this area. I believe it is fair to say, regarding the important issues involved, that, while there are many exceptions on both sides, *animal* experimentation continues to support Lashley's⁸ theory of mass action and equipotentiality, but the literature dealing with aphasia in *humans* tends more and more to substantiate Nielsen's work on cerebral localization. The crux of the disagreement, which by the way is so often overlooked by critics of cerebral localization, is just this: cerebral localization in aphasia deals with language, and language is the most important difference between animal and man.

Some Basic Neuroanatomy

Figure 1 presents the four basic lobes of the brain: the frontal, temporal, parietal, and occipital. Two large fissures

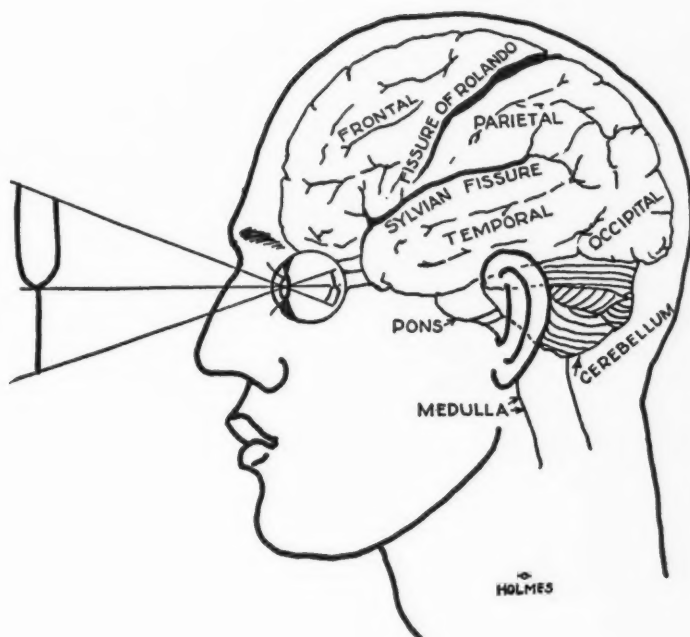


FIGURE 1
CEREBRUM: BASIC LOBES

appear on the cortex as fundamental landmarks: the fissures of Rolando divides the frontal from the parietal lobe, while the Sylvian fissure separates the temporal lobe from the frontal and parietal lobes. The anterior limits of the occipital lobes are not marked by sulci or gyri but by cytoarchitectonics.

Figure 2 presents a vertical section through the brain. The longitudinal fissure divides the brain into a right and a left hemisphere. In general it may be said that the right side of the brain controls the left half of the body and, of course, the left hemisphere controls the right half of the body. Anatomically this is brought about by the fact that most of the nerve pathways to and from the body decussate, or cross, to the opposite side in the spinal cord, the medulla, or in the lower centers of the brain itself.

This figure also shows the corpus callosum: a great flat layer of fibers which connects the two halves of the brain. The Sylvian fissure separating the temporal from the parietal lobe is quite in evidence. Other structures which will become important to us later are: (a) the thalamus, located in the center; (b) the hippocampus, located on the inner side of the temporal lobe, and (c) the temporal isthmus—through which important neural fibers pass from the temporal lobe to other parts of the brain. Aside from the extent of the lobes, the thing that impresses us most is the beautiful symmetry of the two sides of the brain.

It comes as a surprise, therefore, to learn that for the purposes of language one hemisphere is always much more important than the other. Approximately 95 per cent of the people who are right-handed will have their language centers established on the left side of the brain. Since "brain-ness" tends to remain on its original side, when the teacher

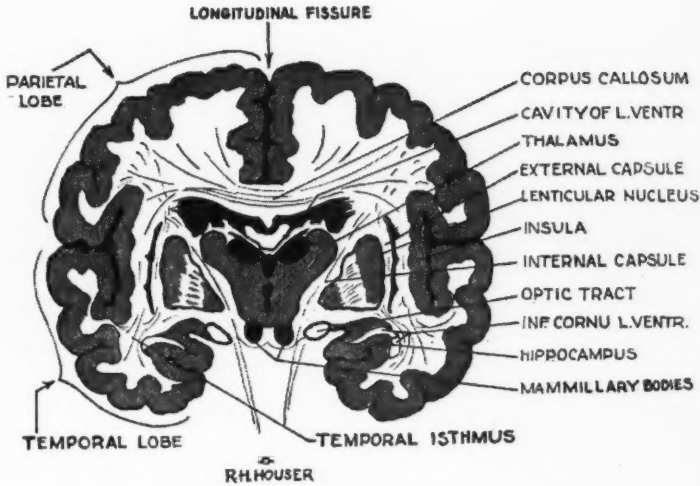


FIGURE 2

CEREBRUM: VERTICAL SECTION

(Modified from R. H. Houser's *Graphic Aids to Neurology*, Scientific Illustrators,
San Diego, California)

causes a left-handed child to learn to write with his right hand, the child gradually establishes a writing center in his left frontal lobe, but the rest of his language areas will remain on the right hemisphere of his brain.

Some Sensory Projection Systems

Figure 3 gives a rough idea of how sensations from the eyes, the ears, and the hands are projected to their primary receptive areas in the brain. When the child looks at an object, such as a fork, the inverted image on the retina of the eye is carried back along the optic nerve to the optic chiasm where the fibers from the nasal half of each retina cross to join with the fibers from the lateral half of the retina of the opposite eye. From the optic chiasm the optic tracts carry the impulses back to the lateral geniculate bodies, which are located on the posterior edge of the thalamus. From these lateral geniculate bodies the optic radiations sweep on back to the calcarine cortex on the occipital lobes. The basic function of the primary visual cortex is essentially that of a relay station.

Figure 3 also shows the pathways which convey sound waves to the primary auditory cortex of the brain. By way of example, the vibrations of the tuning-fork shown in the figure, enter the ear, traverses the middle ear by the three little bones, enter the cochlea where they activate the cochlea hairs and hence the auditory nerves. These nerves enter the lower portion of the pons, rise, and finally make their way to the medial geniculate bodies located on the posterior surface of the thalamus and in close proximity to the lateral geniculate bodies which subserve vision. From the medial geniculate bodies, the fibers proceed up and outward to terminate in the superior surface of the temporal lobe. Note that the surface of the temporal lobe has been turned back to afford a better view.

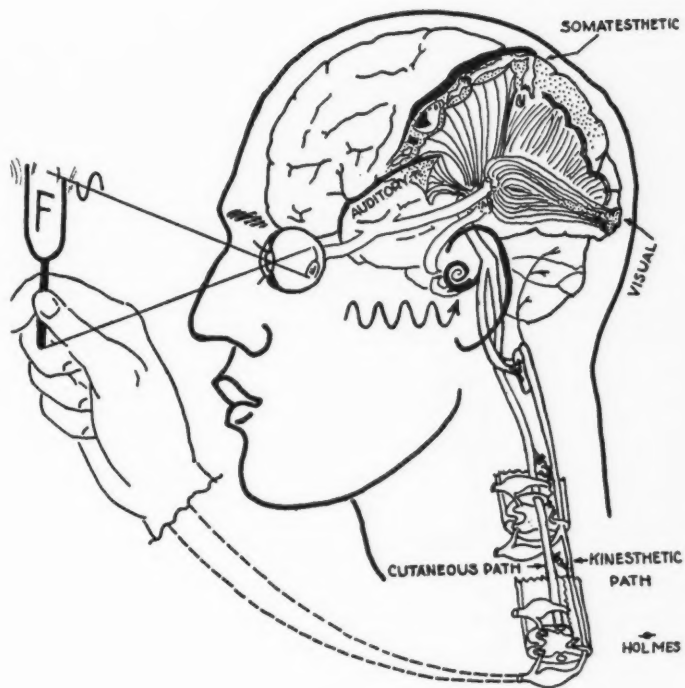


FIGURE 3
SENSORY PROJECTION PATHWAYS TO CORTEX

On figure 3 also are sketched in the general pathways which the superficial sensations of touch and the deep sensations of proprioception take. These sensations enter the spinal cord via the posterior roots, cross to the opposite side of the cord (the impulses for tactile sensations cross almost immediately, those for proprioception higher up at the level of the medulla), and, like the impulses from the eye and the ear, make their way to the posterior end of the thalamus. From here, the fibers of touch and proprioception fan out and up until they finally terminate in the somatesthetic area located along the posterior border of the fissure of Rolando. By closely observing the little half-homunculus sketched in this area, one can ascertain some notion as to the relative area in the brain that is given over to each of the various parts of the body. Comparatively speaking, the organs of speech (located where the two major fissures meet), the lips, thumb and hand take up the most space.

As has already been inferred, these three primary projection centers actually deliver very little, if any, usable information to the brain. Nevertheless, the brain of the child, as the brain of the adult, has the task of identifying, storing, recognizing, recalling, and integrating such impressions into those cortical engram patterns which finally constitute the essential associations of an idea—e.g., tuning fork. In order to show how this is done let us systematically locate the cortical areas where each of these functions takes place.

Sensory Association Areas

From 1909 to 1914 Professor Brodmann¹ mapped out the brain in terms of its cellular structure. I mention this for two reasons: (a) the internal consistency of scientific explanation is one of the criteria of its validity—and herein lies the beauty of cerebral localization, because (b) subse-

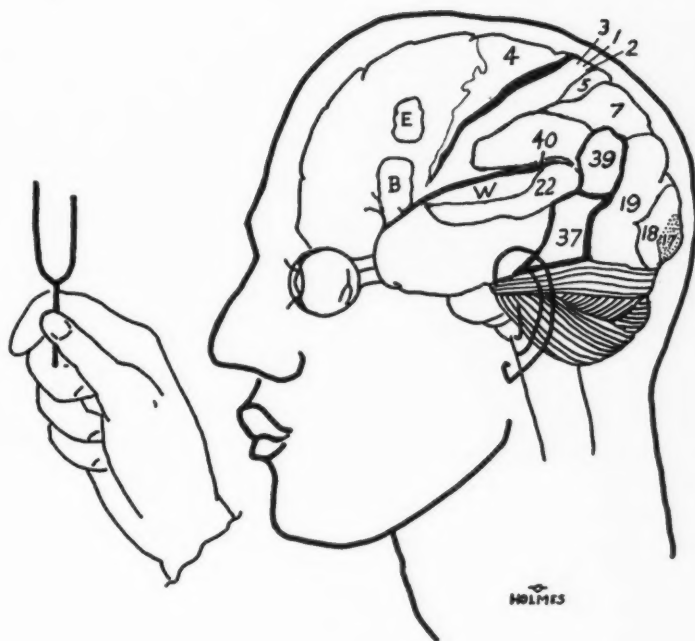


FIGURE 4
VISUAL, AUDITORY, SOMATESTHETIC, AND LANGUAGE FORMULATION
AREAS

quent research has shown that, for the most part, each of Brodmann's histological areas in the brain subserves some specific function.

It has been shown that Brodmann's cyto-architectonic area 17, in the occipital lobe, corresponds exactly with what we now know to be the primary visual area of the brain. Figure 4 has this area stippled. From the primary visual area impulses are relayed to areas 18 and 19 where memory engram patterns are laid down. The visual memory engrams in area 18 are utilized specifically for the identification or recognition of objects when they are seen for a second time. A lesion here results in an inability to recognize objects within the field of vision. This is true, even though the person is not blind, and will avoid hitting objects as he walks through a room. Furthermore, the individual may still be able to revisualize quite clearly those objects which he once could identify by sight alone. When this happens, we say the person has visual agnosia for objects—that is, he cannot recognize what he sees!*

Area 19 is used to store the visual memory engrams used when one re-visualizes in his mind what objects looked like. The details of objects, such as texture, color, shape, size, and dimensions, are all stored here. Furthermore, areas 18 and 19 not only store the memory engrams for objects, but also classify these picture-patterns in a systematic way.

A memory engram of a tuning fork may, therefore, be laid down under the general category of "Forks", or it may be simply indexed under "Instruments". In either case, however, the "index file" will contain "picture-engrams".

*Recognition, of course, is still possible through the other senses which are not impaired.

So far, we have not spoken directly about reading, and for good reason, for the memory engrams for visual symbols are stored in still another area of the brain.

When the child, at school, sees a demonstration of the function of the tuning fork, and watches the teacher write the words "TUNING FORK" on the blackboard, the memory engrams for these words are laid down in what the neurologist refers to as the angular gyrus or Brodmann's area 39. Here the symbolic expressions are categorized in much the same manner as were the objects in adjacent areas 18 and 19. The difference is, that in area 39 both the engrams of visual recognition and visual recall of written or printed symbols are deposited; whereas, for objects, recognition is allocated to area 18 while recall is dependent on area 19.

As has been indicated, for right-handed people the left hemisphere is the major side of the brain when it comes to laying down memory engrams for language. Hence, area 39 on the major side is where the visual recognition and recall of symbols take place.

Perhaps it should be mentioned, that on the average, the child learning symbols in his first reader, must "read" a new word about 35 times before its engrams become firmly established. In aphasia, when a man has had his major angular gyrus knocked out by a brain injury all this is lost and a long period of re-training must begin. But, what is re-trained?

Recovery in aphasia, after a lesion has destroyed a language center on the major side, requires that the heretofore *passive* but homologous center on the minor side be reinforced by training until it can take over the lost function. It appears to this writer that two important elements enter

into the training of such centers on the minor side.* They are (a) the stamping in of new engram memory patterns, and (b) the establishing of new engram habit patterns for the mobilization of cerebral energy. As Nielsen⁹ points out, the minor side (like infantile brains in general) fatigues very easily, but gains in strength as the engrams become organized and accustomed to functioning. Actually, the establishment of a new language center may take months in a young person, but it will take years in elderly folk. While the recovery-time is somewhat influenced by native ability, the physical condition of the patient, former training, and present motivation; nevertheless, many words will have to be taught thousands of times before the patient can make them his own.

Before a symbolic expression can take on meaning, significance, and richness, many complex cortical associations must be made. For instance, the subcortical connections between areas 39, 19, and 18 are necessary if the child is to learn to recall what the object looks like when he sees only the words "TUNING FORK". Likewise, these connections are absolutely necessary if the child is to be able to re-visualize the words when he sees the object. These simple relationships are, of course, too simple. Language is a complex phenomenon.

In most people, the angular gyrus can functionally fulfill its task of recognizing and recalling symbols only when it is in close association with that part of the cerebral cortex in which auditory symbols or sounds are laid down. When the tuning fork is struck, characteristic sound waves emanate from the instrument. These sound waves, as is indi-

*With the school child, these same elements must be important to the training of his major centers.

cated in Figure 3, are conveyed to the superior margin of the temporal lobe. From this primary auditory area, (Brodmann's area 52) the impulses pass to Wernicke's area (shown in Figure 4.) In Wernicke's area, (Brodmann's areas 41 and 42) the memory engrams for sounds are laid down—on both sides. However, when the teacher *pronounces* the words, "TUNING FORK", the memory engrams for speech, while being impressed on both sides, nevertheless, tend to be deposited most strongly on the individual's major side.

Wernicke's area, and perhaps a large part of area 22, (See Figure 4) are used to classify and store the auditory memory engrams for words. A destructive lesion in these areas on the major hemisphere causes the patient to have auditory verbal agnosia. The patient will not be able to recognize speech, but he will correctly identify the hum of the fork, or the toot of a tugboat. Consequently, although he knows what he wants to say, he may say the wrong thing and may not recognize that he has said the wrong words when he hears himself say them. In this case, Wernicke's area, on the minor side is functioning—but poorly. Obviously, Wernicke's area and area 22 must be connected with area 39 if the proper sounds are to become neurologically associated with their visual symbols.

In learning to read, most children find it not only necessary to listen to what the word sounds like, but they must also say the word out loud in order to learn it. As is indicated in Figure 4, Broca's convolution (Brodmann's area 44) is located in the lower portion of the frontal lobe. It is in this area where the memory engrams for the muscular motor-patterns of speech are laid down. From this area, impulses play on area 4, the motor center, from which the neural impulses travel down the cord to the muscles of the

body—in this case to the mouth and organs of speech.

As experts in the field of reading, you will appreciate the fact that many people never learn to read without using at least some subvocalization. In fact, even the most astute readers tend to revert to this type of reading when placed under a strain.

Exner's writing center, as Figure 4 illustrates, is located just above Broca's area. In this area are stored the memory motor-pattern engrams for writing words, but not for drawing. Like the speech center, impulses from Exner's writing center also play on area 4.

Grace Fernald² has shown that many children can learn to read only if and when they *trace* the words while simultaneously pronouncing and looking at them. When the teacher employs the kinesthetic method of Fernald she obviously (though, perhaps unknowingly) is trying to establish those associational connections in the child's cortex which will tie together Exner's writing center, Broca's speaking center, the center for symbolic revisualization in the angular gyrus, and Wernicke's hearing center!

The full reason why the Fernald techniques work, I believe, requires a broader and more fundamental explanation. The very primitive modes of sensation which come to us via the sense of touch and proprioception must also be taken into account.

These cutaneous and kinesthetic feelings, coming in from the mouth, fingers, and other parts of the body, deliver to the somatesthetic area, just behind the post-central sulcus of Rolando, the basic knowledge of *bodily contact* and *physical reality*. Impulses arising in the skin, tendons, muscles, and joints bring to us firsthand information regarding the

nature of the physical world. From them, we learn what things feel like, and how it feels to run the fingers over objects.

Figure 4 depicts the locations of these somatesthetic areas. Here, I would like to hypothesize that it is the close dependency of *all* other cortical areas on the somatesthetic areas which accounts for Fernald's kinesthetic phenomena. Its success I believe, is only a special case of a general principle. Let us pursue this line of thought a little further.*

Inasmuch as the somatesthetic area in infants is the most important (everything goes into the infant's mouth), it is probably *this area* that *teaches* each of the other cortical areas the fundamental meanings behind their own particular sensations—as maturation brings each mode of learning into the service of the individual. If such is actually the case, it seems to this writer that we may expect that a few children will enter school before they have had their visual area 39 truly awakened to the trick of revisualizing symbolic materials. Such students, of course, once having been taught to read by the kinesthetic method would no longer need the trick of tracing in order to continue their learning of new words; because the re-visualization center for symbols has now learned how to learn.

While I am *not* a champion of the kinesthetic method in the sense that all reading should be taught in this way, I am convinced that at the kindergarten or pre-kindergarten levels much more work could and should be done in this area. Some children are primarily kinesthetically minded, some auditorially minded, and some are visually minded; but *all* children start out predominantly kinesthetically minded.

Hill-Young and Hawk have stressed the effectiveness of the moto-kinesthetic method in training speech-defectives.

The task of the school is to make them first auditorially minded, and then finally visually minded-viz., give them the ability to handle symbolic manipulations.

Another cortical area of major importance in language is what Nielsen^{9 10} has called the language formulation area. This center corresponds, roughly, to Brodmann's area 37, and is located in the inferior-posterior portion of the temporal lobe. Figure 4 shows this area in relation to the other language areas already mentioned.

In the language formulation area are stored the memory engrams which govern the recall of appropriate word order, thus making it possible for a person's speech and writing to manifest good syntax, grammar, and style. I would not expect this area to be of any particular importance in comprehension or power of reading, but I would expect it to be very important to speed of reading. I base my hypothesis upon the fact that what Nielsen¹⁰ calls "language formulation" subsumes, I believe, what teachers call "word sense"; and Holmes⁶ has already shown that the factor word sense accounts for nearly one-third of the variance in speed of reading among college students.

Not long ago Dr. Hyman and I⁷ reported on a chap who, as a result of a blow from a bottle on the head, lost the use of his left language formulation area. You will be interested to learn that while Mr. R. J., the patient, could read slowly with understanding, he could not write. While he could understand all that was spoken to him, his speech contained many errors of syntax. When asked to straighten out a "mixed up" sentence he could not do it. He had no trouble at all in remembering the words, he could repeat them with ease — in their original mixed up order — but, he simply could not straighten them out to formulate a good sentence.

This patient also illustrates very nicely how different areas of the brain may be called into service for different kinds of spelling ability. Mr. R. J. was given four forms of a high school spelling test. Table 1 presents his responses to the first five and easiest items. On the multiple-

choice form of the test he did very well. Note that in the choices offered in the first four columns he marked every one correctly. When these words were dictated to him, however, he was not able to spell correctly a single one. Column 5 gives his responses when he tried to write the first five words. Column 6 shows what happened when he tried to "peck" them out on a typewriter, and in column 7 are his responses when he tried to spell the words orally. From this we learn that the language formulation area (presumably area 37) is necessary in order to spell from dictation, but that this area of the brain is not required for the type of spelling ability utilized by a proof-reader when he merely detects that words are misspelled.

TABLE 1

Mr. R. J.'s Responses on Five Easiest Items of the *High School Spelling Test* Under Four Different Conditions

Recognition from Visual Inspection Multiple-choice Spelling Test				Recall from Dictation		
				Writing	Typing	Oral
1	2	3	4	5	6	7 ^a
1. brav	<u>brave</u>	brve	brev	<i>ban</i>	berk	da
2. dinner	dinr	<u>diner</u>	denr	<i>dinn</i>	diinir	dinnird
3. <u>honey</u>	hony	huny	honny	<i>hun</i>	hucy	hogny
4. pont	pount	poynt	<u>point</u>	<i>run</i>	tite	poynt
5. theaf	theif	<u>thief</u>	thefe	<i>doud</i>	eebe	thef

^a Typed by examiner from patient's oral responses.

It will be recalled that when I introduced this subject I put some stress upon the fact that the visual, auditory, cutaneous and kinesthetic projection systems all came in close proximity to one another in the region of the thalamus. Recent findings^{4,10} indicate that these thalamic stations are

connected with the hypothalamus; and, the hypothalamus is in close association with the hippocampus and hippocampal gyrus.

The hippocampus and its projected fornix curl around the thalamus. Nielsen believes that the everyday experiences of the individual are stored by engrams successively deposited in the hippocampus and hippocampal gyrus. It is for this reason that when a traumatic blow on the head results in a loss of memory, the amnesia always extends backward from the time of the accident. Great periods may be lost, but the childhood memories tend to remain.

Now, if the experiences in the classroom are pleasant when the teacher writes "TUNING FORK" on the blackboard, pronounces it, and demonstrates its use; the *experiences* will be laid down in the hippocampus and perhaps the hippocampal gyrus, but the *emotional* components must also be stored as memory engrams if they are to be recallable. For it must be, that a change in the nervous system's engram patterns is the thing that carries all types of learning over from one day to the next. Such engrams for the memory of the emotional overlay appear to be deposited in close association with the hypothalamus,⁴ and cingulate gyri.¹¹

In the foregoing discussion, I have *not* been talking about intelligence. No, I have been talking only about the language centers of the brain, and for the most part, only those located on the major hemisphere. It must be obvious by now, that what we have been calling language centers do not and cannot work by themselves but must be supported from many other "centers" as well as by general intelligence. Specific centers of the intellect are, however, much more difficult to pin down. Cognitive thinking calls for an active integration of many concepts involving, simultaneously,

many areas of the cortex-associative, language, and non-language.

There are some cortical connections from the thalamus and hypothalamus to the frontal lobes. These forward areas, apparently by some inhibitory mechanism, exert control over the rest of the brain. Studies in lobotomy and lobectomy^{4 10} indicate that the frontal lobes are the seat of wisdom. The case histories of those patients who have lost their prefrontal lobes indicate that, while they still retain their intellectual acumen, they lose their initiative and sense of propriety. Their acts are not guided by long term planning and they manifest a marked change in their basic personality structure.

We may aptly close, therefore, by recalling our opening statement; which is, that "Reading is a Process of Making Discriminative Responses." If we consider this theme in terms of the whole child, that is, in its larger sense, it becomes obvious that *what the child does* with what he reads depends upon the engrams deposited in his frontal lobes!

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Brain Injured Children Learn to Read Their Environment

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To a teacher of a brain injured child, teaching reading is not just teaching a skill—it is saving a life! Nor is teaching reading to brain injured children just conditioning them to respond to the written word. Rather, it is teaching them to *read the environment*. Every day we see lost children come to life as they learn to read in this larger sense.

The brain injured child is probably the most misunderstood of our many "problem" children today—misunderstood by his own parents, by psychologists, and by his teachers.

Our school was established primarily to work toward a better understanding of these children and to train them toward a better use of what capacities they do have—to help them approach normality.

Most of our children were injured prenatally or at birth, a few by high fevers and infections in infancy, and several by external accidents, such as falls. They are not physically crippled. They all can walk, but most are awkward in their coordination.

The problem of working with children whose injuries occurred so early in life is, of course, quite different from that of *re-training* veterans or others whose accidents happened in adulthood to a fully developed brain, following years of experience in using it.

Since most of our children have *never* had the full use of their brains, they are consequently limited by not having had the everyday growth in *experience* common to the normal child. What they have had, they have not been able to profit from because their recording and broadcasting systems have been so restricted.

It has been our problem to help untangle these systems, to help them learn to *receive* impressions in a more normal way and make them more available so that *expressions* can be more normal and more satisfying.

Most of these children are sad, unhappy and confused when they come to us. Their strange organic behavior has, of course, involved their emotions (and the emotions of everyone around them) so that often the older they are the more serious the problem. This is everyone's problem. Parents, communities, taxpayers, governments must deal with it. In studying this problem perhaps our experience may plot the course. Here's a sample of how we work.

Peter, a desolate ten-year-old who was brought to us two years ago, was a sad example of all the woes these children suffer. Literally no one had ever understood him. He had been labeled everything from a "juvenile delinquent" to an "incorrigible imbecile". Psychologists had rated his IQ at different levels between 40 and 80. It was not until, in desperation, some one had suggested a neurologist that it was discovered that he had a brain injury, probably resulting from a high fever at 10 months.

When I first saw Peter, he was not displaying any of the violent and anti-social behavior with which his records were filled. He looked utterly defeated and a little scared. He had been in and out of the public schools for four years,

but had never progressed beyond the 2nd grade. His achievement level was below kindergarten.

School had been nothing but a frustration for Peter. Like most brain injured children, he couldn't sit still and was incapable of controlling his hyperactivity. His attention span was so short and he was so distractible that concentration was impossible for him. This, plus his clumsiness in walking, running or using his hands, was always getting him into the wrong place at the wrong time. School work was very difficult for him. He didn't see well through his smudged up glasses that slipped half-way down his nose. His hearing was poor. His shaking hands wrote so large that he could scarcely get more than one word on a whole sheet of paper. His voice was loud and unmodulated, his speech fuzzy.

One problem that Peter didn't have, which is common with these children, was convulsive seizures, often called epilepsy. The tranquilizers have helped children with this problem a great deal, but not entirely. Peter's type of seizures did not cause him to "black out". His were the more misunderstood form which appeared on the surface to be an unprovoked temper tantrum. Actually, it was caused by pressure on the brain. This too can be helped by drugs and by the child's own understanding of what is happening.

With this background, we started helping Peter learn to *read the environment*—to help him become the person that we felt he was capable of being even though in his ten years he had never been more than a frustration to himself and to all who had tried to help him. He still did not know how to relate himself to space and time. He was not yet a part of the environment which the "normal" child accepts and learns without formal coaching.

The first step, of course, is motivation. A genuine dose of praise and a new pair of glasses did wonders for Peter. As he gained some self respect, he joined the other children in the many "games" they play while acquiring a relationship with the every day things about them.

He discovered that even sitting still occasionally can be fun. One way that Peter grew to enjoy quietness—a new experience for him—was to play the listening games, such as one where we all sit perfectly still while the second hand travels all the way around the clock. During that long minute the children listen for all the little sounds around them and afterwards have great fun *taking turns sharing* what each has heard. In such simple ways as this, they become aware of their relationship with their environment. They also learn the significance of time and the wonderful feeling of sharing what they have learned.

While they are becoming oriented in space and time, they are also learning number concepts and to put names and labels on the things about them. Starting with themselves, they learn the concepts of one and two—one nose, two arms, etc.,—reinforced by other ones and twos farther out, one door on that wall, two windows on that one, etc.

Then on out one of these doors to the parking lot where they expand their concepts of space and numbers to include all those beautiful cars in the parking lot. One has a single windshield. That windshield is divided into two parts. There are windows and wheels to count, colors to comment on, license plates to read. There is a wealth of exciting adventures in that parking lot when seen through the expanding environment of a brain injured child.

This type of activity might be called a readiness pro-

gram. It is that, of course, but it is more. The explorations these children make have to be more directed. They often have to be experienced kinesthetically, concretely, and repeatedly before concepts are permanently formed in their minds as a basis for improved behavior.

There is less carry-over for these children so the more real their tools are, the more meaningful their learning will be.

We use the same theory when helping them become more adept in social relationships, another form of *communicating with their environment*. Here we lean heavily on role playing and dramatization, from simple little acts of learning to take turns to more complicated dramatizations, such as planning and carrying out a lunch at a restaurant. We use them for previewing actual situations and for post-viewing others.

Peter was the hero in one such drama just after we had had a visitor who had been mobbed by the children. Following a discussion of how the situation might have been improved, Peter became "Mr. Jones". He solemnly came in to "see how the children are getting along in their work." Each calmly told him about his projects and about the school. After several similar incidents, that group of youngsters played their parts well when real visitors came in.

The many games and devices we use, all emphasizing the *concrete*, form only part of the program. From the beginning the children are learning reading in the narrower sense too, the actual reading of printed words. Each has his own name on his chair. The day of the week is on the board. A clock and a calendar are referred to frequently. Objects are labeled. Experience charts grow, and some children, even

the so-called "hopeless" ones, pick up a limited but *meaningful* reading vocabulary.

Once he felt accepted, Peter's drive to learn was tremendous. He caught on to printed word reading quickly and is now reading easily from books on the third grade level. Writing was harder for him. His shaking hands had difficulty starting anew with each letter, so we dropped manuscript and taught him cursive writing. This was somewhat easier for him, and now, with great effort, he keeps it within the lines and fills several pages each day.

In a broad sense, one of the things which seems most to help these youngsters is relieving them of the pressures they so frequently have felt in other situations—shame from their parents, ridicule by other children and pressure to work harder from their teachers. Another is keeping their learning tools concrete, their schedules in a regular routine. As long as their goals are kept within their possibilities, their successes emphasized and their failures forgotten, many of them far outdo anyone's expectations for them. When the parents catch the spirit of what we are doing and carry on with the attitude of acceptance in the home, the child really blossoms.

In two years Peter has become a real leader in his group. He is now an outgoing happy boy, considerate of his playmates and progressing continuously in academic and social skills. His speech has developed to the extent that he was chosen to represent the children at a campaign dinner recently where he told a roomful of adults what our school is like, a 100-word speech composed by him and his classmates.

Best of all he is a *happy* youngster. His eyes sparkle. He is full of fun. He is working hard. He is taking his own place as a productive member of his home, his school and his community.

People Are for Talking—Some Suggestions for Creative Oral Language Activities

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People are for talking — so might a pragmatic five-year-old define people. Children, being people, are also for talking, and the classroom is the place where talking, or skill in the use of oral language, must be developed. Although there are those who feel that children do enough talking as it is, the teacher who understands the importance of effective oral communication today will encourage children to express their creative urges through a variety of oral language activities.

However, creativity in any form is always beset with obstacles which must be overcome in order to assist a child in his creative efforts. In developing creativeness in oral language activities, the teacher, for example, will find himself confronted with a classroom of children representing a wide mixture of backgrounds. The children may come from homes where they have been exposed to a multitude of readiness experiences and have acquired large vocabularies of meanings, or they may have come from an environment which has deprived them of opportunities to develop meaningful vocabularies. We are told that the average child of six years probably understands around 24,000 words and adds an understanding of 5,000 more each year. The teacher, then, must see that each child has time to explore and experiment with his environment in order to help him acquire and expand his vocabulary.

This is no easy task in view of the dynamic characteristic of the English language. Many common words in daily use have acquired devious and subtle shades of meaning which challenge even the adult. Take the word *fast*, for instance. The dictionary lists at least twelve different uses and meanings for the word:

He runs very fast.
The clock is fast.
The cloth is a fast color.
Stand fast!
The boat was stuck fast on the reef.
Make the boat fast to the dock.
She is a fast woman.
We fast during Lent.
He is fast asleep.
It was a fast track.
It was a fast race.
Stay fast by me.

Creativeness in the classroom is hindered, also, by the fact that teachers, too often, teach a program that does not encourage children to express deep, inner emotions through the creative media of music, rhythm, words, clay, crayons, and paint. Perhaps such teachers feel thwarted by classes that are much too large or perhaps they are expressing inadequacies in their own training or background. But, whatever the reason, it is out of these classrooms, lacking in imagination and creativity, that a hatred for school and education on the part of the pupil will develop.

Man Was Not Born to Talk

A third obstacle to creativity in oral language activities is the communication process itself, for man was not born

to speak. This speech mechanism which we take for granted was designed for more functional and practical purposes than speaking. Our lips which we use to produce the sounds *p*, *b*, and *m*, are needed to help us keep foods and liquids in our mouths. The teeth which we use when we make the *f*, *v*, *s*, and *z*, sounds are more important as food-cutters and grinders. The tongue, used to make such sounds as *t*, *d*, *n*, *l*, *r*, *k*, *g*, and *ng*, serves a more practical purpose in moving food and liquids back into the throat where they can be swallowed. The voice box, itself, which is the source of the voice, is necessary for keeping foreign matter out of our lungs. The vocal cords close each time we swallow in order to protect the lungs. However, we have made use of our lungs to supply the air which is essential to the production of speech.

Speech, then, is a function which has been superimposed on a mechanism designed for the basic purposes of preservation of life—eating, drinking, swallowing, and breathing. As a result, when the speech function comes into conflict with such functions as eating, drinking, and breathing, speech is the one which gives way. Try running up a flight of stairs and then reciting the pledge of allegiance to the flag. Oral communication will be decidedly impaired for the mechanism of speech must be used to help the body recover from its period of exertion. Similarly, attempts at speaking while eating or drinking produce somewhat messy results. Speech gives way to the more basic function.

Speech fright, better known, perhaps, as stage fright, is a more familiar application of the fact which we have been discussing. Under the emotional stress of getting up before an audience to speak, your body has set into motion all of its protective devices to save you from the "perilous"

position in which you have found yourself. Your heart has stepped up its action and is pumping blood rapidly. Your rate of breathing has increased. The body is ready for flight. Not being able to yield to this primal impulse, you make an effort to cope with the problem directly. By this time, your mouth is dry and a wad of cotton seems to have filled it, but your palms are moist with sudden sweat. Your knees are quivering, your fingers are a-tremble. If you have been called upon to speak without an opportunity for preparation, your words will probably come out in a hesitant, choppy rhythm—or you may blank out completely.

Teachers see this breakdown of the speech skill constantly during oral activities in the classroom. An understanding of its cause should help the teacher alleviate the problem when it occurs. In fact, in order to use oral language creatively, children must be helped to control these feelings of speech fright and to utilize to the best advantage the physiological changes which have taken place in the body. Creativity implies a degree of freedom. The bonds of emotional stress, inhibition, and fear can result only in a stifling of creativity.

Reading One's Environment

In order to help the child control his speech mechanism and express his creative urges in an effective manner, the teacher should be aware of the way in which a child receives impressions which will seek an outlet later. Long before the child has learned to read from the printed page, he has been reading his environment.

He has learned to read with his eyes. He reads the clouds in the sky and the flowers in spring. He reads the friendly smile and the stern face of command.

He has learned to read with his ears. He reads the songs

of the birds and the sound of crickets in the night. He reads the crying of other children and the noises of the city.

He reads with his fingers. He reads the texture of cloth—the gentleness of velvet, the roughness of linen. He reads daddy's whiskery cheek before daddy has shaved and he reads the left-over stickiness of a lollipop.

He reads with his nose. He reads the smell of flowers in bloom and the smoke of burning leaves. He reads the odor of hamburgers on the backyard barbeque and the smell of freshly-baked bread.

He reads with his sense of taste. He decides those things he likes to eat and those things he does not like to eat.

This, then, is the way he reads his environment—he sees, he hears, he feels, he smells, he tastes—and he wants to recreate what he reads with his senses.

Setting Up A Creative Classroom

Have you prepared your classroom so that it is receptive to the child's desire to create?

Is there an *art center* with easels, poster paint, water colors, colored chalk, brushes, a supply of paper and portfolios to hold the child's art efforts?

Is there a *clay table* where he can express himself in three-dimensional form? It should be equipped with modeling clay, boards on which to model, a container for rags, a clay jar, and tools for making pottery.

Is there a *music and listening center* with child-made musical instruments, water glasses, seed pods, rattles, drums, and tone bells for experimentation, recorded creative songs and records for listening?

Is there a *library center* with chairs and table near book-

shelves with plenty of picture books, story books, informational booklets, encyclopedias, and magazines?

Is there a *games center* equipped with simple commercial games and teacher-made games to develop reading, arithmetic, and spelling skills?

Is there a *construction center* equipped with workbenches, sawhorses, woodworking tools, nails, lumber, paints, and brushes?

Is there a *picture center* equipped with old magazines, scissors, and file boxes so that children may collect, label, and file pictures for use in their language arts, social studies, and science activities?

Is there a *hobby center* where children may bring their own collections and hobbies for display?

Is there a *science center* with weather charts, live specimens, containers for planting seeds, bulbs, and plants, and other experimental materials such as magnets, magnifying glass, thermometers, prism, compass, etc.?

Are there *bulletin and display boards* where pupils may help plan displays of all kinds?

These are ways of exposing a child to the materials that will lead to creativity as he seeks to express the things he has read with his senses.

The Uses Of Language

This paper, however, is concerned with only one area of creativity arising out of reading—creative oral language activities. With this in mind, perhaps we should take a look at the purposes for which we use oral language:

1. We use language to control the behavior of others,

either directly or indirectly. Direct control would be a request to a person to sit down or to refrain from doing something. Indirect control might be exercised through a group participation activity such as role-playing in which there is an attempt to solve problems and modify behavior.

2. We use language to attain social status. The adult, for example, has a variety of language patterns—one which he uses with his own family, one which he uses with his peers, one which he uses with his employers or superiors. He may also display a language for informal occasions and a language for formal affairs. The child, in order to attain status with friends, adopts the language patterns of his gang. He may even affect certain speech mannerisms in order to draw attention to himself.

3. We use language as a form of amusement and wit. We may deliberately use an inappropriate word, or attempt a pun, or even use slang in our efforts to be witty and amusing. The Reader's Digest department, "Toward More Picturesque Speech" illustrates very vividly this use of language.

4. We use language to derive pleasure from the sounds of words. The babbling stage of infancy is the baby's way of showing his enjoyment of sounds. And all of us, at one time or another, have let the thwarted poet in us produce poetry for the sheer pleasure aroused in the process. The teacher who reads good poetry and prose to his class will find children responding with a growing appreciation for literature and a desire to be creative in their own writing.

5. We use language to establish rapport with others. Listen to your own small talk when you next greet a friend or sit down for a conference with your principal or a parent. This use of language requires no significant content and

may be a verbal sparring as you each try out various patterns of language in establishing the social relationship.

6. We use language to meet our own personal needs. We express defiance, resentment, joy. We swear. We pray.

Our use of language reveals our personality, for each time we speak we open a window into our innermost thoughts and feelings. If we attempt to portray a personality that is not genuine, we find areas of nakedness being revealed in our choice of words, our grammatical structure, even in our tone of voice and the voice quality itself.

Painting Pictures With Our Voices

Oral language experiences in the classroom take many different forms. They include experiences in dramatic play, creative dramatics, group discussion, role-playing, choral speaking, reading aloud, making reports and giving talks, storytelling, puppetry, mock radio and television shows, interviewing, assembly programs, and ordinary conversation. In all of them, the voice is important. The child needs instruction and guidance to help him achieve a voice which is pleasant to hear and which can express adequately and accurately the emotional and intellectual content of what is being read or presented.

An artist paints pictures on canvas, using brush and paint to recreate his experiences for others. The speaker paints pictures, too, pictures with words, and he uses his voice to do it. He uses changes in pitch, loudness, rate, and quality to achieve his effect. Children can be helped to develop these vocal skills through simple exercises. To change pitch, for example, a child makes his voice go up or down. This is sometimes called inflection. Have the class take turns saying *hello* or *good morning* in different ways—angrily,

pleasantly, happily, tiredly, with boredom. Can the children hear the difference in inflection patterns? Can they produce this difference in inflection patterns?

In changing loudness or volume, the child's voice gets loud or soft. Have the class recite the alphabet or count from one to twenty going from soft to loud, loud to soft. Soft to loud to soft, loud to soft to loud. Can the children hear the difference in loudness patterns? Can they produce this difference with their own voices?

In changing rate or speed of speech, the child speaks more rapidly or more slowly. Using numbers or the alphabet, have the class start slowly and speed up or go from rapid speech to very slow speech. Try rapid to slow to rapid and slow to rapid to slow, also. Can the children hear the changes in rate? Can they produce these changes in rate of speech themselves?

Experiences with voice quality are more difficult to develop with children, but they can recognize the breathy quality of a whisper or the harsh sound of an angry shout. They can imitate the deep voice of Big Bear and the tiny voice of Little Bear in the story of "Goldilocks." These are all examples of changes in vocal quality.

Now take a selection with which the children are familiar, i.e., the pledge of allegiance. Have the class select those words or phrases on which the voice goes up or goes down, those words or phrases on which the voice gets louder or softer, those words or phrases on which they speak more rapidly or more slowly. This pledge will take on a new meaning for boys and girls, as well as the teacher, when prepared in this manner. The children will also gain a new understanding of their voices as instruments for expressing themselves orally.

Language As A Tool Of Expression

The voice being the instrument of expression needs something to express. Here is where the teacher can move into the child's field of creativity and guide him into a more skillful use of language as an expository or descriptive tool for oral and written language activities. Through the use of imagery—an appeal to one or more of the senses, whether visual, auditory, tactile, gustatory, or olfactory—the child can find new satisfactions in his search for creative expression. Here his skill as a reader will help him, for he has the vast library of great literature to stimulate his efforts. The teacher can encourage this development of the use of sensory imagery in language in many ways:

1. Explain to the children that everything that moves has a sound or movement that is unique in some way. Then, using name words (nouns), action words (verbs), or color words (adjectives), have the children express the sound or movement of water, a kitten, a puppy, a garbage disposal, a lawn mower, a washing machine.

Example: The dripping of water, the gurgling of water, the rushing of water, the cool deepness of water.

2. Write the name of something or somebody on the chalkboard and ask the children to describe the object or person.

Example: HOUSE—vine-covered, tumbledown, silent and still, noisy with the sound of children, sad with neglect.

3. Place simple sentences involving some kind of action on the chalkboard. Have the children think of better action words.

Example: John *walked* to school. Substitute *ambled*, *hurried*, *meandered*.

Example: My sister *played* the piano. Substitute tinkled, banged, pounded, stroked.

4. Place sentences containing blanks on the chalkboard and have the children fill in colorful and sparkling words.

Example: Jack had three — (size), — (color), — (kind) dogs.

My father has a — — car.

5. Have the children complete lists of comparisons such as these:

as smooth as
as dark as
as loud as
as soft as
as slow as
as squeaky as

Example: The water in the lake was as smooth as glass.

6. Have the children build descriptions which tell color, size, where, when, what was happening.

Example: I saw an enormous yellow butterfly fluttering gaily from flower to flower on my way to school this morning.

7. Have the children complete phrases like these, telling when, what, where, and how:

I heard a dog bark
I heard a bird sing
I heard a baby cry
I heard leaves rustle

Example: I was awakened early this morning by the angry barking of a dog somewhere down the street.

8. Have the children think of as many synonyms as possible for various common words.

Example: RED—crimson, flame colored, blood color, ruby, rosy, maroon.

9. Have the children write blank or rhymed verse by listing several things they like to hear, or see, or feel, or smell.

Example: These are things I like to hear:

Mother singing as she works in the kitchen,
The twittering of birds in the early morning,
The gentle sound of rain on the roof,
These are things I like to hear.

These are but a few of the ways by which a teacher can motivate the child whose creative urge seeks expression through oral or written language activities. The teacher who is prepared to explore and use techniques such as these for developing creativity in oral language activities will be rewarded by happier children using the English language in a more effective manner.

Reading Music in the Language of Emotion

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Music makes a strong and direct appeal to the emotions. It goes straight to the heart of man and arouses a responsive vibration in him. This power to kindle feeling affects all human behavior. In every phase of living, music exerts an influence on individuals and groups of people. It can cheer and comfort them, and it can unite them in worship, in patriotism, and in community and family relationships. Its energizing force is felt in the morale-strengthening songs of soldiers on long marches; of men in fields and mines and on ships and on docks who spontaneously raise their voices in song to lighten their load, both materially and spiritually. Even in industry, factory heads, after thorough research in methods of efficiency, use piped-in music for a dual purpose—to ease tension and to speed up production.

Children have the same capacity for emotional responses as adults and are therefore equally susceptible to music's charm. Their natural reactions to the form and order of organized sound can be directed toward patterns of behavior that are an intrinsic part of creative living. Because music is a vital stimulus for children, it impels action that engages both feeling and imagination. Self-expression becomes purposeful expression, relieved of tensions and self-consciousness.

All children have an instinctive love of music. They grow increasingly aware of its beauty as an art as they have

many pleasurable experiences suitable to their level of maturity. The possibilities for such experiences are limitless and can only be touched upon here.

Young children come to school with a rich background of listening. From infancy, they have been able to distinguish sounds in their daily routine, voices of parents and of friends, the distinctive quality of tapping, knocking or ringing sounds in the home. Their expanding world abounds with sounds too numerous to mention, yet all of them that have meaning to the listener are accurately categorized. These aural impressions furnish material for musical play; they are the beginnings of discriminative listening.

Creative Use Of Rhythm Instruments

The progression from environmental sounds to the timbre of instruments is a matter of refinement only. Built upon past experience, children's natural interest in colorful sounds can be guided into artistic expression by orchestrating music with percussion. Although these rhythm instruments demand little skill in playing, an effective use of them calls for keen listening, good judgment in the selection of an appropriate instrument for a particular piece, and thoughtful execution to achieve the desired result. This is a creative act perfectly gauged to a child's musical development: he is interpreting music with an instrument by reading into it—through the exercise of all of his faculties—more than he heard originally.

Older children derive the same satisfaction from percussion. They use it in a variety of ways. For example, some time ago, a group of seventh-graders visited the New York Stock Exchange. When they returned, they worked together during the music period to recapture their aural impressions

of this exciting trip. The result was an improvisation in percussion, a vivid restatement in their own terms of a memorable experience. In addition, through it they expressed their natural feeling for form in music, for contrast, and dynamics. Upper grades use percussion as accompaniment for dance compositions, too. With well chosen instruments, a small group of players can set the mood for a dance drama; their accompaniment can support and animate the dancers. But the most intriguing use of percussion—in accord with the trend of popular music which is such an important factor in youngsters' lives, today—is the playing of exotic-sounding Latin-American instruments which so effectively point up the beat and varied rhythmic patterns of Afro-American dance songs.

The value of rhythm instruments is that they help to organize aural impressions in musical expression. Children become aware of form and structure in music, of subtle differences in pitch and timbre, of the effectiveness of dynamic gradations, and aware of music's power to communicate an endless succession of moods. This kind of learning, derived from daily living and associated with pleasureable activity, gives them an appreciation for the essential characteristics of music as a language of emotion.

Rhythmic Movement in Daily Living

Children come to school experienced in another of music's attributes, *movement*. In both primitive and modern societies, dance and music are coincident. Rhythmic movement gives children the opportunity to sense music through their bodies, to become physically aware of its elements in everyday living. Starting with the basic movements that can be activated by music such as skipping, walking, running, swaying, galloping, trotting, hopping, and jumping, children

proceed to more subjective interpretations that express personal reactions to their environment. One becomes the traffic cop at the corner; others, workers in the street, or firemen going to a fire, a street peddler, or a tradesman. They act out a train journey, steering the train through a tunnel or backing a long line of cars onto a side track or into the roundhouse, carefully observing the laws of train traffic in their play. The waterfront's busy harbor, building projects on city streets, changing weather conditions, every aspect of country living, these and many more provide stimuli for children's dramatizations. They want to act out everything they see in an attempt to understand it better. Pantomime of this sort can, but need not, be accompanied by music. With serious purpose, children will create a rhythmic composition in themselves, expressed in the movements of the bodies rather than by the sound of instruments. The precision of their movements depends upon their maturity, as does the success of their moving in relation to each other. This is serious play; it demands imaginative thinking, concentration, and co-ordination, in free but rhythmic movement, allied as well to music and dance as to creative living.

Music In Creative Living

At each age-level, there will be new data to assimilate through sensory and emotional identification. For instance, a class of third graders who had come to music directly from science, spontaneously organized themselves into a personification of the solar system which they had just been studying. One group, the largest, locked arms in a circle to represent the sun. Three children, representing the earth, did likewise and, as their small circle turned, they moved slowly around the sun. A single child, as the moon, ran quickly around the earth, keeping pace with it as it moved around

the sun. They changed places, repeating the experiment, defining relative speeds and distances until their concept of the cosmos was vitalized in the form of harmonious movement. Music can help children to clinch their learning in many areas of study.

It is obvious that children can implement their understanding of history and geography with music. The customs, traditions, and emotions of all the people of the world are mirrored in their songs. When children are familiar with these songs the image, absorbed emotionally, sinks deep into their consciousness and is likely to remain with them. The history of our own country, too, comes alive to the child who knows his great heritage of American songs. Cowboy songs, Negro spirituals, indigenous work songs, play party and love songs, songs of the docks and the railroads and the rivers—all tell tales of America in the making. Children feel closely identified with their traditions as they sing traditional songs, play and dance to traditional music, and as they recreate dramatic events and situations in their own dramatic way.

There is no limit to the variety of music which appeals to children: folk music of all the civilized world; exotic music of primitive peoples, including the roots of jazz from Africa; and art music of every style from the pre-classical period to the modern, including contemporary composition; each musical system valued as a product of its own culture. In every period, there is music in its *original setting* suitable for different grades of maturity. Romain Rolland has written in an essay on music, "Art, like life, is inexhaustible; and nothing makes us feel the truth of this better than music's ever-welling spring, which has flowed through the centuries until it has become an ocean."

Music As A Subject In The Curriculum

A diversity of materials and opportunity to use them creatively promote favorable attitudes toward music. Children feel an easy relationship with it, they enjoy it in work and in play. At the same time, they are learning the vocabulary of the language and, if there is purpose and design in experimentation, they become interested in the basic elements of music. Little by little, they comprehend its motivating principles. Thus, knowledge of music as an art is paced by the experience of using it expressively.

At every stage of development, — indeed, in practically every music class, — specific problems arise that call for investigation. A few examples at the sixth-grade level will serve for illustration. It is likely that a syncopated rhythm in a lively Afro-American song will need to be studied in detail so that it can take its place in the total rhythmic scheme of the song; that a progression in harmony be analyzed as the movement of separate voice parts; that a melody in an unfamiliar mode be traced to its original scale, compared to the more usual major and minor modes, then used as a model for piano improvisations until, finally, children return to it no longer as an unfamiliar melody organization but as a meaningful expression in music. When information is technical, all former knowledge must be summed up to cast light on the new problem. An important aspect of intensive study is to allow sight to bolster hearing; the symbols that represent the problem under consideration may often help to clarify it. Notation then becomes a tool which will serve children in their continuing association with music.

Historically, singing, dancing, playing instruments, and creating music came long before the written record. When there was reason to spread musical ideas, a system of notation

was devised, a purely arbitrary system, in which certain symbols represented pitch of the voice and rhythm of movement. This system was revised in succeeding generations and has now become a standard code of communication. However, before one can decipher a code, he must be literate in the language. In order to read music, the score must recall feelings and sensations experienced in former situations. A written record of music can hold only as much delight as one brings to it. This point cannot be too strongly stressed because both adults and children have been led to believe that they can learn about music through the reading of notes, whereas the order of learning is exactly the reverse: *one can learn about reading notes only through first hand experiences with music.*

When a child studies an instrument, reading notation is a matter of association. He learns to connect the sound and its symbol through his ears, his eyes, his voice mechanism, his whole body. And then his arms and hands must remember positions if he plays the violin or piano; his mouth, if he plays a wind instrument. This learning through association also involves subconscious memories of physical and mental activity. Without these memories, it is virtually impossible to interpret printed notes musically; the results of "intellectual" reading are faltering and spasmodic without lyrical flow or rhythmic precision.

On the other hand, when the symbols of music are symbols of prior—and pleasurable—activities, the drudgery of note reading is dispelled. Children understand meter and the division of beats when time value relate to their own pulse and to rhythmic movement. The rise and fall of a recorded melody is clear when they have sung many engaging songs which they have further enjoyed playing by ear and by

note on instruments; when they have observed the structure of music in phrases as a guide for gratifying performance; when they have unravelled complexities in a rhythm, a melody, or a harmony because they wanted to know how to get greater satisfaction in musical interpretation.

Reading In The Language Of Emotion

Reading notation to widen one's knowledge of the literature is most certainly a part of musical growth but it is only one facet of a kaleidoscopic art. Since the beginning of human thought, music has served mankind as an elemental form of expression. How well it can serve children now to express their emotional reactions in daily living, and how effectively it can channel their instinctive responses into rewarding action will be determined by their experiences.

Music as an emotional language can be read by everyone. It has the power to communicate its essence of order and beauty to the wise and to the foolish, to the skilled and to the untutored. In the words of the eminent music psychologist, Carl Seashore, "All art is play, and the charm of music, the purest form of art, lies fundamentally in the fact that it furnishes a medium of self-expression for the mere joy of expression and without ulterior purpose. It becomes a companion in solitude, a medium through which we can live with the rest of the world. Through it we express our love, our fears, our sympathy, our aspirations, our feelings of fellowship, our communion with the Divine in the spirit of freedom of action."

Reading Is Creative Learning for the Deaf Child

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"You speak and he doesn't hear. He speaks and you do not understand."³ His dramatization must become creative to bridge the communication gap. This is the deaf child. His feelings like radar antenna are registering our degree of acceptance or rejection of him. He is creatively reading on a psycho-physical level which we, as hearing people, have failed to "tune-in" on in many instances.

For our purposes today, I am using the term "deaf child" to indicate two types of hearing impaired children. Those who are deaf from birth and those who are educationally deaf. Both types have not been able to acquire language through hearing but must learn it mechanically. He may hear some things such as a hammer pounding, a door slamming or a heavy object falling. He does not hear words as you and I do.

A variety of special talents and abilities as well as limitations are found among the aurally impaired just as such talents, abilities and limitations are found among all school children. The deaf child can be accepted in the *hearing world*. In Compton, we find such acceptance is very comfortable at the nursery age and kindergarten level. As the language of the hearing child outstrips his little deaf friends, acceptance is still a reality if skilled teachers and parents help both the deaf and hearing children and teachers understand each other.

Our aurally impaired children go to parties, belong to Camp Fire Girl, Girl Scout, Boy Scout groups; take part in church groups, play in instrumental music groups; join in sports events and in general participate as *children* throughout the school years. They do these things in varying degrees as do hearing children.

Each time the deaf child goes into a new group his parents and teachers must be available to fortify the hearing world by teaching them of the abilities and limitations imposed by a hearing loss. How to talk to the aurally impaired child and an understanding of what speech-reading is and how it is used by the child helps people to bridge the communication barrier. Just to know you must be in good light and facing the deaf child is a way to make both comfortable. Hearing people are often afraid of deaf people and they in turn are afraid of being misunderstood.

What is speech reading? One might broaden it to include situational-reading. All children learn language in the following developmental sequence. Experiences allow them to develop a concept about a person, things or ideas. These concepts are built out of the experiences of touching, smelling, seeing, speaking, and hearing.

When words are used to express these concepts or ideas, the child takes the next step of recognizing that sound can have meaning. Objects are discovered to have names attached to them. This is the step our deaf and deafened children have been denied. Normally a child imitates speech patterns from auditory stimulation and the recognition of this important step in the language sequence has been prominetely discussed in the literature throughout recent years. Betts, Burton, and Durrell, make a great deal of this point.¹

From the auditory step it follows that the child begins

to speak. His oral language then becomes his heritage — a precious tool of learning. For many years, the oral facility of the child will outstrip all other language areas. Speech is a criterion we use to determine whether or not a student is ready to go further in the language sequence.

Good speech leads the way into the fabulous land of printed word reading. This great adventure opens magic portals to all children. Lastly, the child takes faltering first steps into the field of writing.

Let us return to our aurally impaired child. The auditory pathway to language is closed and this automatically veils the language road. Ideas, the very essence of life, appear to be the unsurmountable hurdle. Ages past these children were doomed to institutions because they were "dumb".

Today we substitute what is technically called "speech-reading" or "lip-reading" or "situational-reading". The child reads the face of the speaker and interprets the movements of the lips, the expressions of the face and the total situation in which he finds himself. Dr. Keith Case, speaks of total situational reading for the hearing "adequate social adjustment of the individual seems to be tied up with accurate and intelligent reading of the social situation in which he must find a part."⁴ So the deaf child must learn early to read the social situation. He can be helped by understanding families that "cue" him in.

Ruth Strang says it another way, "We read not only with our eyes but also with our minds and our emotions. Reading is part of the individual total development."¹⁰

The complicated situation for the deaf is well described by Dr. Edith Meyer:

"Lacking the necessary mechanism the deaf child is excluded from auditory orientation; he has to rely on vision, smell and touch only. His comprehension of space and time therefore remains limited. He does not hear his mother clatter the dishes when she is in the adjoining kitchen and does not hear his father's car coming. He is unable to localize events that are outside of his immediate sphere of action. He, therefore, appears egocentric and bound to the immediate concrete situation much longer than the normal child. He does not learn to anticipate events by their sounds, is frequently startled and surprised by unexpected happenings, he appears to understand only what belongs to the specific moment and has difficulty in adjusting to time sequences . . . The deaf child remains dependent on primitive emotional satisfactions much longer. He does not like to stay alone in a room; he likes to be cuddled, rocked and held. He is often slow in toilet training and likes to put objects in his mouth. He needs immediate gratification of his needs and may appear demanding and unreasonable because he is anxious, cannot understand delays and cannot comprehend other people's intentions and explanations.

While all these peculiarities may be easy to explain, they are in practice often difficult to live with . . . Amongst the young deaf children that come to a diagnostic clinic one can distinguish two types: we see some children that are lively, outgoing, responsive and imitative. They are sensitive to expressive gestures . . . The parents of such children are usually delighted with them; they are sure that the child understands everything that he sees. Their only concern is the delay of speech and lack of response to auditory stimuli. They

communicate with him through gestures and vivid facial expressions . . .

In contrast to this friendly group of young deaf children we find others that seem aloof, sober and easily withdrawn. They have very little contact with people, do not try to get clues from facial expressions and do not seem to expect any comfort from interpersonal exchange . . . Frequently we find this type of child living in a family that largely depends on language for interpersonal contact; the parents and siblings of these patients are not accustomed to demonstrations of affection. They may perhaps know how to express their feelings in words but not in gestures. They find it impossible to communicate with their deaf child and profess that they do not know what he feels or thinks. They are usually suspicious of mental retardation and are deeply disappointed. They are apt to become impatient and frustrated when they cannot get their ideas across to the child who does not understand them and is only aware of angry and insistent facial expressions. He gathers that he is not living up to expectations and finds that his experiences and interactions with people rarely rewarding and agreeable."⁷

Thus the kind of child and his environment early determines some of our success or failure in teaching him this "cue" conscious skill. Speech reading must begin at a very early age. Reading readiness of a more formal type such as labeling is often begun earlier than with hearing children. Each item in the room is named and the printed symbol often attached at home as well as at school.

Vocabulary building is a "back-breaking" task that never stops for parents and teachers of the deaf. Words are

necessary to gain ideas yet the deaf seem to have an inner language. Arthur B. Simon, a deaf adult, gives a personal testimonial to the thinking facility of a young deaf person when he speaks of reasoning in terms of images at three years of age.

"I could reason then, but only in terms of images — not words. I think this way very often even now.

Grief, fright, wonder, happiness, excitement. I had all these feelings. I recognized what they were, even when I could not express them in words."⁹

Awareness of social or situational reading must accompany the technical skills of speech reading. Asking, "What are you talking about?" looking for clues in faces, where people are looking, and the emotional tone or feeling evidently are ways the teacher finds to help bridge the hearing gap of the deaf.

Speech reading leads the deaf or deafened child to the magical road of printed word reading. A new pathway for ideas comes to him. As Burton, Baker and Kemp emphasize² the need of bringing meaning to the printed page, so the teacher must constantly extend meanings and experiences to develop them. Sister Anna Rose states it well when she says, "We learn to read in order that we may read to learn. Why then do we read? To learn. Reading to learn! This then, states our purpose in teaching reading, sets the goals for which we work, and which . . . we will attain."⁸

Later in her article she continues, 'Proficiency in reading fosters social adjustment, wherein a child who is deaf, by feeling his ability to see and learn practically everything

his hearing brothers and sisters do, becomes acceptable to himself, as well as others, because he has arrived at the mental, moral and psychological goals of reading to learn, and has, thereby, attained secure happiness."⁸

Now he is reading. Comprehension in English raises its monstrous head. What to do with a language that has so many many meanings for the same word. Many a teacher of the aurally impaired has worn stockings with "runs" to teach its meaning.

The fine reading program for hearing children is essential to the aurally impaired child. Careful planning of lessons to develop all the skills plus constant enthusiastic motivation by the teacher must be employed. Experience stories become the "news" in the class for deaf children. Dramatization, story telling and speech reading stories must not be skipped just because they do not hear. Teaching them to read for information does not exclude teaching them to read for pleasure.

Last of all the children will tell you of a book they have read for pleasure.

I should like to conclude my remarks with a quotation from Alice A. Kent's article of December, 1956:

"We can *grind* away at the job; *grind* our teeth over the difficulties encountered; lose *ground* and gain *ground*. We may think we have laid the proper *ground-work* for intelligent reading, but we still have to provide a clear concept of the word *ground* in the particular setting in which it occurs in order to have the deaf child read with comprehension."⁹

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Motivation for Reading

BY A PARENT, SYBIL FIELDER

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Creativeness is the result of individuality. Nowhere is this truth more startling than in the growth and development of children. Each has his own potential response to external stimulation and we as parents must continually remind ourselves that the seed grows in spite of us and that our function as cultivators means for us persistent vigilance and patience and most of all a readiness to accept the freshness of each new situation. Somewhere I read that most of us use only one fifth of our potential capacity—that most of us are only 20 percent alive. My major problem as a parent is how to increase awareness not only of the physical world and its basic patterns but how to develop an awareness of abstract realities beyond exterior appearances. Truth at any cost is the goal.

I need not fortify here any hypothesis concerning the value of reading for creative living. Reading increases our knowledge and both satisfies and whets curiosity. Reading fosters initiative and resourcefulness. It provides material for thought, substance for understanding. Most of all it increases awareness of both the world of fact and the world of imagination. But Reading is like Fire. It can support prejudice or it can break it down. It can spell tremendous knowledge without benefit of wisdom.

Habits of critical thinking are developed early in the home environment. The problem of motivating reading by parents I believe to be essentially one of developing a search-

ing attitude toward ideas. Pre-school years are a rich wonderland and it is during this time that a child sees, feels, imagines and learns to read situations through the perspective of his acquired attitudes. We parents have the first glimpse of individual interests and these are the keys to development. One of our children pored over an old edition of Gray's Anatomy. He couldn't understand the text, nor could I, but he was fascinated by the diagrams, especially of teeth and bones and the circulation of blood. From there we went to a Puffin book on the human body and eventually to Mr. Hemo on TV. The chance shape of a string left over from a marble game can lead to the boot of Italy—and we wound up with spaghetti!

We parents must encourage expression of ideas. The child says two colors go together because they have the same "brightness." Then he says that one pair of colors is sunny and the other two are foggy. He's learning to say what he means.

We parents must delight in reading aloud, and then, most important of all, we must take time and make opportunity to use what has been read. We read Pocahontas, made an Indian costume. We made a simple loom and wove a miniature Navajo rug along with Indian lore, sign language and Peoples of the Desert on TV. We visited the mission at Pala and saw some real Indians.

One of the most fun things we do is looking up facts at the moment of question. It's like a treasure hunt. Is a skunk a rodent? How do snakes burrow? What pictures are on coins? An argument between siblings, were there Rebels or Revels in the Civil War? And what is a Rebel in "boy language"?

We must continually try to discover with children the basic principles and patterns of construction in the Form of whatever is being examined. Suppose there were no numbers over 10. Can you multiply in Roman numerals? An octopus and a jet both operate by jet propulsion. Does each atom have a solar system?

In the beginning it is easy to over-emphasize the mechanical skills of reading. I am not questioning their importance, but I think we must not forget that a child's mind is actual living substance and more important than either reading or talking which are but forms of communication and not to be substituted for that which is communicated. These mechanical skills I am willing to leave to the experts who can compile statistics on normal development based on many cases. Yet I am certain each child has his own norm and perhaps our differences are more important than our likenesses. I believe with Thoreau, "If a man does not keep pace with his companions, perhaps it is because he hears a different drummer. Let him step to the music which he hears, however measured or far away."

Being a parent of two active boys, ages $7\frac{1}{2}$ and 10, both of whom have been virtually non-readers, I should like to enumerate some of our failures.

From the beginning we have had books and magazines available in our home, and being a librarian by profession, and an avid reader myself, I have been properly shocked at their seeming lack of interest in reading for themselves. We have gone to story hours at the library. We make regular trips to the library and each boy draws out the maximum allowance. Usually they make their own selections, and if they need help I encourage them to get advice from the librarian. The books are usually gathered up the day due—or

after—and nobody has read a word unless browbeaten.

Occasionally there are exceptions, and perhaps we need to help more with selections. The 10 year old will choose books too difficult for him to read himself. For a while he had a passion for prehistoric animals, but some of those words are pretty horrible. We tried to go at book selection from their interests but then I ended up reading to them.

Again we tried careful selection from a list of sure fire substitutes for comic books. Fine for reading aloud but not interesting enough to practice those underdeveloped reading skills.

Perhaps we read too much aloud—but I don't think so. For I am sure they are learning the important things about reading—the togetherness of listening, the chance to express an idea about the sensitivity of the princess who slept on the pea (The P's just a letter, says one with tongue in cheek)—the chance to exercise imagination, to be delighted and share true humor.

We have tried to cooperate with the schools by frequent conferences. One child had professional remedial help. The teacher said he had no reading problem. His was a problem of concentration and this had physical causes stemming from prolonged illness. At one point testing was suggested for the other child but never accomplished. Classes are too large and this is nobody's fault. We bought flash cards and phonetics cards but this was labored. We tried regular short daily reading periods, but these were resisted.

Establishing a suitable time at home for reading is a problem. For active boys after school outdoor play is a necessity. Bed time is a weary time for concentrated effort. Television offers some competition for time but we limit the pro-

grams—by giving them each \$1 a week TV allowance and charging them 10c a program. They must choose from certain programs and they may save the money if they forego watching. The old Chinese proverb which says "A picture is worth a thousand words" is really true. Television is a worthy form of communication of ideas and we accept it as a tool to be used to widen horizons and stimulate interests. We have had lists of books related to TV programs, but these have so far been ineffectual. We are stuck on the mechanical skills.

There are emotional factors in every child's development. We have had illness in the family and this undoubtedly has some bearing on the problems. Yet, we are not aware of any real problems of insecurity or frustration.

Finally we came to eye examinations. The 10 year old has 20-15 vision and needs glasses for reading. He does well in everything but reading. The glasses are new and we're hoping. Suddenly about three weeks before he flunked the second grade the younger boy started to read—and voluntarily. But by that time a sense of failure began to damage the child. He hated school. All of a sudden—and too late—he tried too hard. He said he got so anxious that he got the shivers. Finally blessed vacation arrived.

Sometimes motivation comes from unexpected sources. One day the 7 year old had a chat with the trash man on the way home from school. He announced that he had found out one thing. When you grow up you have to work hard. It's hard work to heave barrels of trash into a truck. He guessed he'd study, and forthwith we had effort!

As parents we are deeply grateful for the efforts of both teachers and librarians and we realize that all of us have a part in effectual motivation. To educate is to draw

out what is already there and it is up to us to endure with patience the trials that seem to be unproductive. Yet I have a certain faith that no proper motivation ever really fails, though it may take time to bear fruit.

I have no misgivings about these children—and others like them. They are exceedingly busy reading the world about them, learning to see relationships and principles, recognizing other kinds of forms and symbols. I am certain that reading the printed word will eventually take its rightful place as a means to an end and they will never have to read something to find out what they are thinking.

The mechanical skills will come with persistence and patience. Our goal is creative living and this follows creative thinking. It is possible to begin with a slide rule and learn mathematics, to illustrate jet propulsion with a tin can and string in the shower, to trace Chinese characters and learn something of the origin of symbols of language. Whatever appeals to the child is for the time an avenue of approach.

Automation puts a high premium on creative intelligence. We adults today are illiterate about things concerning which we are called upon to make decisions—radiation, for example. We need more short cuts to communication. There is too much to know and not enough time for understanding. It is necessary to search for single ideas and simplicity within seeming complexity. All greatness begins with simplicity and humility. Children are exceedingly great, simple and humble. They see relationships and they throw ideas into fresh combinations with no effort at being original. Barely able to talk the child said, "A windmill looks like an umbrella going round and round."

Children should grow up in an atmosphere of intellectual expectancy in order to live creatively, and Reading is a real gadfly—even when an underdeveloped skill!

Initiating Reading Through Creative Writing

DR. R. VAN ALLEN

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"The teacher who walks in the shadow of the temple, among his followers, gives not of his wisdom but rather of his faith and his lovingness.

"If he is indeed wise he does not bid you enter the house of his wisdom, but rather leads you to the threshold of your own mind."

So said the Indian prophet, Kahlil Gibran, many centuries ago. Today, we in education express the same philosophy when we say, "Learning must be based upon the experiences of the learner," and "The teacher must accept each child where he is."

But much as we agree with these principles, most of us seem unable to teach accordingly. In the case of teaching reading to children in the first grade, we are prone to follow rather rigid practices. Before we ever see the children we are to teach, we have been given the materials for reading. In these, everything important has been *prepared*, *predetermined*, and *pre-patterned*—selection, order of presentation and frequency of repetition of words; which context clues to use; what consonant and vowel sounds to teach and when; and other matters of teaching method. Most of the materials were prepared by someone in a distant city even before the children we teach were born.

By teaching in this fashion are we not placing unneces-

sary limits on the achievement of most of the children? Can we not remove these limits and *still* have an organized, well-developed reading program? Some San Diego County school teachers are convinced that they have found a way to do just this.

During 1956 pre-school workshops, several first-grade teachers decided that they would put into practice what they had been saying for many years about giving each child an opportunity for optimum development in language. Their previous experiences with children's creative writing had convinced them that the children have within themselves—in their own thinking, imagination, and interests, in their own "see-ers" as well as in their "speakers"—the necessary basic material for a program of language development with CEILINGS UNLIMITED!

These teachers were willing to try teaching reading out of the well-worn groove established by prescribed teaching materials and methods.

How To Begin?

That was the big question. "We can't begin with prepared readiness sheets, because they don't represent the ideas of the children we teach," was the first point made.

"We can't begin with a list of basic sight words, because those may not be the words that represent the thinking and the interests of the children during the early days of first grade," was an additional agreement.

"We can't begin with group stories dictated by the children, because only a few participate at first, and we want participation on the part of every child from the beginning," was the further conclusion.

Then How?

From their pooled experiences, the teachers decided to try using children's earliest self-expression in "writing" as a beginning point in teaching reading. "Writing? Children don't *really* write in the first grade." But when a child makes a picture with crayons, he is "expressing" an idea that has meaning to him, and to him it is his way of *really* writing. In this sense, it is writing except that he doesn't yet know how to record his thinking in words. Crayon drawing is an activity that most children do with ease as a result of kindergarten experiences. The difference in using this as a starting point in language teaching was going to be in the treatment of the ideas that the children represented with crayons. Beginning with the first day of school, these teachers would give each child repeated opportunities to come to the threshold of reading without forcing an entrance.

In each of these classrooms, children were asked to bring the pictures of their own choosing and own making to the "reading group." There the teacher invited comment about each picture and together she and the child decided on a story to be written on the picture. The rest of the children watched eagerly as they saw the speech of one child take form on his picture. They participated by helping the teacher decide about initial sounds, capital letters, punctuation.

Although the reproduction of the story by reading it was not a requirement, the teacher found that each succeeding day additional children would try to "step across the threshold" by reading something which they had said for their picture story.

The children were so proud of their stories that they wanted to keep them. With the help of the teacher, they bound them into books for the reading table. When these

books took their place alongside the other printed books, every child had a desire to read them because they were what he and his classmates had written.

Interest in the reading-writing process became so great that children needed more space and time for this self-expression. The teachers began to use all available space in the room to carry on the activity. They equipped easels to hold the children's stories and cleared spaces on the floor for the children to work with large pieces of paper. They developed writing centers with helps for children who were writing on their own.

To keep the reading-writing program going week by week, the teachers had to maintain an environment rich in ideas and receptive to the products of children in the form that they were produced. Since children do not create in a vacuum, the teachers constantly "devacuumized" their classrooms by reading to the children, telling stories, showing films and pictures, playing records, and having songs, field trips, dramatizations, and games. As the children gave pictorial and verbal (oral and written) expression to this interesting and rich environment, the teacher was available to write new words, write part or all of a story, help children clarify statements. The child's part was to keep on putting his ideas into pictorial and written form with gradually developing attention to correct use of language and to expansion of vocabulary.

What Were the Results?

The children had crossed the threshold! Just one example will illustrate the abundance of raw material for reading which a teacher received from a group of beginning first graders who brought their pictures to the "reading circle."

This is what they asked the teacher to write on the pictures which represented their thinking —

- "I wish I had a dog." Dona
- "This is my house and flowers." Ida
- "Here is my pretty sun." Becky
- "See my fish." Michael
- "Here is my bird and my big tree." Chris
- "See my big red apple tree." Candy
- "I'm moving into my new house." Zoe
- "Look at my house and flowers." Sandra
- "I plant my flowers." Lana

Contrast the "raw material" of these nine children with the usual material found in a first readiness worksheet. Of course, the children were not expected to read the captions on the pictures at first, but they did read them soon after the picture stories were fastened together into books for the reading table. Books from other groups also made popular reading material, and before long the classroom became filled with materials which the children could read—the books they had made as well as textbooks and *trade books*.

In such a situation the abundance of reading materials is unlimited! The level of reading and writing is unlimited! Fast learners are challenged—slow learners are challenged.

The limitations imposed by the use of the highly controlled vocabulary found in any basic reading series were not present to restrict the reading development of the fast learners in these groups. Their selection of words for writing and reading was limited only by their individual vocabularies. Neither were the slow learners frustrated by trying to remember words for which they had no real need in their ex-

pression; at the same time, they were stimulated to keep trying to use new words for their stories.

But What About The Development of Reading Skills?

Reading skills were developed informally, but word counts made of such independent writing (which children can read because they wrote it) indicate that the reading vocabulary is from three to four times as great as that introduced in any standard basic reading series at the pre-primer level. Children who had the experience of reading and writing from their own experiences and ideas *prior* to reading from basic readers could then read the textbooks with ease and were able to read from *fifteen to twenty pre-primers* in a matter of a month. Because they had watched their teacher record their speech and had learned to write some on their own, they had developed among other skills such important ones in reading as

- left-to-right eye movement
- line-to-line progression
- awareness of sentence structure
- increased power of sustained attention
- ability to organize ideas
- ability to sound out words, beginning with the recognition of sounds of initial consonants and progressing to more complex phonic situations
- Ability to hear and recognize endings such as *s, ed, ing*
- use of context clues to recognize a word in their own stories
- use of picture clues to recognize words in the stories of their friends
- a sight vocabulary of those words which naturally recur in children's writing.

With basic skills such as the ones described above initiated in the reading-writing situation, the prepared materials in the basic readers were used to give the reading program some plus factors. For example, basic skills began to be habituated through the successful reading of numerous books. The sense of achievement from reading books successfully established a confidence conducive to rapid progress. Basic vocabulary words which were not recognized by sight were checked for further study and used in written expression. The elements of phonics which were learned in the letter-by-letter recording of language in writing were used in a functional situation in reading. The teacher always made sure that the minimum phonics program of the basic reading series had been accomplished by every child.

Have the Teachers Met Their Goals?

The teachers who thus took the limits off their language program for first-grade children are already reporting success stories. They say that

- they have found new ways of individualizing reading instruction
- they are able to begin where the child is in his understandings and experiences
- they are making a real use of the vocabulary of the children being taught
- they are beginning the language experience with children's own ideas—their thinking—and moving from there toward the understanding of mechanical aspects of reading and writing
- they are placing value on real achievement rather than upon “parroting”
- they are using faith and confidence as their geiger counters rather than selected words and skills.

The teaching of beginning reading through creative writing activities has offered CEILINGS UNLIMITED in many first-grade classrooms in San Diego County. WHY NOT TRY IT?

Four Boys and Their Boxes

PRISCILLA NEFF

Helping Teacher, Pomona City Schools

This is the story of how four boys and their boxes taught a teacher to read life as they read it; minds kaleidoscoping with imagery freshly created; hearts bursting to communicate the simple beauty of every-day experiences. These enduring delights masked insights almost too tender to be shared and were bright with discoveries too startling to be tied down to the word symbols found in school primers. At the time primers and other reading texts were presented to them, during the first three grades of school, the four boys had been too engrossed learning how to read life, to pay much attention to such mechanisms. Suddenly, it was too late to grasp what other children were attacking so easily. Lost in a maze, the four boys stared at meaningless marks whose importance now menaced the freedom of their minds and slowly cramped their hearts.

By the time they had outgrown the primary grades they were set apart from their schoolmates and they communicated this fact cleverly, not depending on words. One of the four, awkward and pushy, persistently violated all the rules which school SAFETIES had posted where everyone could easily read them. Soon known as the playground pest, he made the most of it. His pal, never needing to join any organized games to achieve his goal, became the big hitter.

To be sure, all four boys were considered fairly useful for odd jobs in the classroom. They could achieve a fair result painting vast oceans of any map project or cutting end-

less paper cubes for mosaic patterns or tracing brown crayolaed mountains for background in a Westward Movement mural. Still, they belonged less and less with the class group, and although the teacher carefully avoided the name which proved it, the four boys knew it belonged to them. Never a day passed without their knowing it. Its ominous status spread, covering the gay imagery of their minds with stagnant emptiness.

The name was "NON READER."

Sullen and mute, the four boys accepted it. But every time they picked up a new book to try out the words in it, hidden despair gripped them. Those printed black symbols were a messed-up puzzle by now. Even when the simplest words were flashed before them on big cards and repeatedly endlessly, the boys couldn't remember them from one day to the next. Gradually, they stopped trying because it was too painful, too humiliating. They knew their name, all right, although they never spoke it. They were "NON READERS" for sure.

What a pity that the one man who could have penetrated their pain wasn't there to arouse their hearts with the simple statements he had been making with such uncluttered ease for the past twenty-five years at Claremont and elsewhere.

"Your teachers are the NON READERS," he'd drawl with that glinty satisfaction in his eyes.

Then he'd let the boys hear the truth full blast; his words coming quietly—their wisdom clipping straight through a mass of foolish verbiage, such as this sentence:

"There's one big book for all of us," he'd say, "and that's life itself. Now get busy reading it again. Pluck out

your own stars before you lose sight of them. Forget the flash cards,

the word perception games,

the *b is a tall building*,

b is on the line

b looks to the right, nonsense.

Throw out the wheels with their consonant blends and the vowel ladders.

All these crutches are for cripples or for babies who still need nursemaids. Perhaps boys like you don't need them as much as your teachers do. Some of them need props to keep them going. But you four are strong enough to use your eyes and your ears and your hands and your feet—and your hearts. Now get busy. Touch life. Taste it. Look at it. Listen to what it tells you. Read it all and you'll love it. Then find a teacher who'll let you tell it back to her. You may find one fast enough to write some of it down for you. Then, all those queer marks on a paper will be yours. Yes, sir, you'll read those funny black marks and not forget one of them. Those symbols are just there to remind folks that life is worth reading and remembering."

The four boys would have dashed off to discover for themselves whether or not that was the truth. Before too long their minds and hearts would be so crammed full of bursting life that they would have been driven to find a teacher willing to listen to them; one who could show them how to cherish their discoveries and at the same time how to give them away.

Strangely enough, their teacher found me, and because I believe in that broad concept of the nature of reading I was able to pass on some of its wisdom to the teacher of

those four boys. With skill and a kind of amused curiosity she set those boys free for a while to learn what they could of life. When their bursting moment came we were both there, ready to listen and were ourselves re-created by the insights they shared with such natural humility and enthusiasm.

The roundabout process by which this happened can only be vaguely suggested here. For nearly two years, the Pomona Unified Schools had entrusted me with a rare privilege of trying to help teachers who were willing to admit they needed help, and to ask me to come into their classrooms to discover with them how to supply it. Of the varied requests, the most recurring one was for ways to help the NON READER.

True teachers suffer intensely when the needs of children entrusted to them are not being met. They will go the last mile of effort and far beyond it, seeking ways to free such children to grow as they were meant to do, with life itself their greatest book. All the skills which educators have slowly accumulated are mere tools toward such fulfillment. Teachers, far more than their critics, know how easy it is to forget to use these tools with continued vision and creative courage—as if there were any other kind worth using!)

But one thing I soon discovered. Teachers never give up. Those who let me work with them offered everything they knew, scrounged for new ideas, eagerly tried them and new experiences began to grow, often created with the children themselves. As often happens, these experiences merged, taking on a life of their own so naturally that a new process was born. New to us who watched it emerge, that is.

For the four boys, and others like them, it was new

and exciting. It seemed to enable children to read life in their own ways, communicating what they saw to others, who set it down on paper in word symbols which the child could always recognize because they were his own. The morning the teacher of the four boys asked me to share their experiences was one of the most exciting creative moments of my life, perhaps because their need to communicate had become so great that it burst forth upon us, full-blown.

For quite a few weeks they had been wandering around the reading room, touching, smelling, exploring, and sometimes shouting, as they came forth from their mute sullen pain. Their teacher often read to them, talked and laughed with them and with what Diment has called "The loving bending over of the consciousness," persuaded them to wipe out the stagnant emptiness of their minds with new imagery. When they were ready, she suggested that they might like to collect pictures, big ones, which interested them. She brought in a pile of them: beautiful scenes, lively with people doing things, animals of all kinds, new discoveries, new worlds. Gradually, each boy chose his favorite picture and mounted it on the cover of a fairly large box. In turn, each boy told what he saw in his picture and the teacher wrote down the words in sweeping script, using a black crayola (unless the boy preferred a special color.) She showed the boys what fun it was to trace over the letters with their fingers, saying the word aloud slowly and watching it come to life there on the paper. Yes, the kinaesthetic method, you say: an old tool, in a re-created process.

By the time the teacher sent for me, the boys had their boxes ready; the big pictures of their choice pasted on top and inside, a handy card file of words which they had chosen to use. They knew me because we had already told stories back and forth around the reading table. Only this time, it

was different. They each said they wanted to tell me the story of their pictures and see if I could write it down fast enough so as not to lose it. We were all . . . ready.

This is the story of exactly what happened that morning; written down as fast as I could get it there right after it happened.

Two of the boys had the beginnings of stories they wanted to tell. One boy had finished his and the teacher had written it down by hand. I started printing it in manuscript letters and asked the boy to trace over the letters with colored ink of his own choosing. I also showed him how to continue with the printing himself. He went at the job proudly. The three other boys at the round table sat watching.

Michael's turn was next. He came over beside me bringing his box and we looked at his picture of a beautiful countryside with flowers and trees, a small pond, a faint white bridge in the distance, the sky barely showing through trees. With alacrity he produced the words inside his box and read them off, pointing out places in the picture from which he had chosen them. Then he began to dictate his story and I could hardly keep up with him.

Once he laughed at my effort. "Your 'b'es aren't very good," he said.

"Never mind my 'h'es," I muttered. "I'm having hard enough time keeping up with you."

With practically no hesitation he finished, picked up some sheets of tag board and went over to the other side of the table to line it off in readiness for the hand-printing.

"Wow, what a long story I got," he said. "And, I got it all out, too."

Michael's Story

THE BUSY PEOPLE

This is a story about a family. There were three girls and three boys. They wanted to go see their uncle. On the way they had car trouble. It was downhill. The man had a flat on the right side of the car. So they fixed it and they were on their way.

Then there was a crack in the road so they had to wait. When they got there, the uncle was not there. So they waited for an hour.

While they waited, they went fishing. The water was purple in some places and blue in some places. The flowers were nice and pink. In other places the clouds were pretty and pink. So they saw a snowman made out of the clouds.

Then the uncle came home. They stayed overnight. The next day they went home and told their friends. And the uncle came to visit them.

Michael had found all this in a picture which had seemed to me rather commonplace: all I had noticed was a seedy meadow and a nondescript pool, dotted with specks of color. I couldn't even find the bridge or the snowman in the clouds until his smudgy finger traced it for me; his eyes alight with amused compassion for my blindness.

Eugene was next with a picture of people sitting around a fountain and a mission in the background. While we went over the words he had chosen and saw them in his picture, Monte at the other side of the table waited with his teacher. He was squirming; his eyes big and brown. I interrupted Eugene to tell Monte to be sure and let me know when it was ten o'clock so as not to miss his turn. Grunting, he agreed.

Eugene told his story quietly and with a rhythmic kind

of hesitation which changed when he reached the words *They sat down and their mother took a picture of them.* At that point he let the words flow, and the smell of his sweating unwashed body was strong, while his voice softened and steadied. How often, when a story is coming out through my hands, has this same process of creation swept through every pore of my being.

There was no question in Eugene's mind about the last word he spoke being the end of his story. He stopped, and then said quietly, "Now shall I start marking off my lines on the tagboard?"

Eugene's Story

A VISIT TO THE MISSION

One day there was a family named Hill. They went around to different places. They stopped at a restaurant and they went on and stopped at a gas station and then they went on and stopped at a mission.

They sat down and their mother took a picture of them. Pigeons flew on them. And there were some pretty flowers, pink and red, and a brown big rock. There was a statue and people were walking around.

They saw a sign which said, "Please don't walk on the flowers."

And they went back home, happy.

How did Eugene, that mute smelly boy discover the lyric flow which held words so lightly yet set them free?

He changed places with Monte. It was now ten o'clock.

"Not much time left," Monte growled.

I was looking at a beautiful picture of Korean or Chi-

nese or Japanese men; priests, maybe, resting near a Buddha, under a magnificent tree on a mountain pass with distant vistas.

"Don't know why I chose such a thing," Monte growled again.

"Because it's beautiful, of course," I told him. "And it reminds me of the time I climbed the Tai Shan mountain in a sedan chair."

"What's that?"

So I told him about that long ago day in China, and the men with their skilled way of lifting the leather thongs of the chair from shoulder to shoulder, shouting a rhythmic *hi-bo* as they lifted the chair in mid-air while the steep canyons fell away on all sides, below us.

"Well," said Monte. "That's something: and now look at the time."

A workman had come into the room and opened a door just behind us. He was sawing a new frame for it when Monte began, "Once there were three people . . ." On he went to the end easily without a stop. As I wrote down his words, chills tickled my spine and my heart burned.

Monte's Story

THE BEAUTIFUL MOUNTAIN

Once there were three people who went to China to climb the Tai Shan mountain. They had to go in a sedan chair.

On their way up, they saw a statue with three Chinese men resting beside it.

There was a large tree by the side of the mountain. The mountain was very colorful. It was green but from a distance

it looked pale blue because the sky reflected on the mountain.

When they finally got to the top of the mountain, they felt that they had conquered the mountain, Tai Shan.

Monte stopped. The pounding behind us kept on. "Just a short old story," he defended brusquely.

"It's beautiful, Monte, and you know it."

"Yeah—but it's not what I want yet. It's a different kind of picture."

"What kind?"

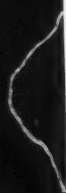
"Science," he whispered,

"So I'll find some and send them to you," I promised. Then I gathered up the papers and took them with me into the teachers' supply room. There I made typed copies, using the large primary type. When I returned to the room, the boys were waiting with their lined tagboard sheets. "I'm going to write mine myself if it takes all day," Michael muttered darkly. "This kind of reading makes sense."

So I left them. Did they become good readers of the printed word in one quick stimulating experience? You know better. Did Monte stop tormenting the SAFETIES? Well, not entirely. Did Eugene lose his rigid resistance? Only at times.

But one thing I know. Those four boys taught a teacher how to read life as they did and perhaps they glimpsed some new treasure, enduring enough to be shared and set down in its proper place in the reading process. For the printed symbol is, after all, only the tag end of the reading process. The printed symbol is the finished product of what was a living experience. It is the memorial, the final express-

ing of created life. From it are sometimes granted insights which light the search for another new experience in living. And this must be created by each of us if reading is ever to have a true and lasting value for us and for the children entrusted to our care.



Special Literature for the Gifted Child

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Surely all of us are agreed that we should give special attention to the needs of our gifted children. We recognize that they are the ones who someday will most likely contribute richly to our society and hold places of leadership in many fields of endeavor. We realize that they must be prepared for this future. We know too, that the ways of preparing them must be many and varied, for they need innumerable kinds of enriching experiences in order to develop their talents, to allow for the unfolding of their personalities, and to produce those social understandings indispensable to good leaders in a democracy.

One of the most important experiences any child can have is that of reading, but it is of particular significance to the gifted child. Therefore, from kindergarten to college, his entire reading program must be carefully guided so it will be stimulating and rewarding to him.

Perhaps, before we go on, two terms in my title should be clarified. "Special" literature is that which has been found particularly suited to a child's maturational level and to *his* reading interests and abilities. It has the same connotation as "The right book for the right child at the right time." The words, "gifted child" must be taken in a very inclusive sense,—meaning that child who possesses superior mental ability as shown on academic tests.

Today it is my intention to tell you of some of the en-

richment practices which the Long Beach Unified School District has planned for its very superior pupils in the fourth, fifth and sixth grades. At this level, it is a two-fold program. One part is concerned with the skills and techniques of reading. This is naturally the province of the teacher. To carry it out, she sets up several reading groups in her heterogenous classroom. This enables her to work in special ways with her "top" students as well as her average or slow readers. To help her with the very highest in this top group, a guide on "The Very Superior Pupil" was published in 1952. This gives samples of many practices which the teacher can use to enrich classroom experiences, many utilizing reading skills. (By the way, our "V.S.P." as we call him, is identified at the third grade and has an I.Q. of 123 or above.)

The second part of the program emphasizes the appreciation of books and reading, and here, the school librarian plays a key role. There is a professional librarian in each of the elementary schools, and from the first grade on, classes make weekly visits to the library to be expertly guided by her in their recreational and informational reading. Beginning with the third grade, classes are split by reading ability into two groups for these visits. Each group is introduced to trade books selected to suit them and their interests. (For example; while they are studying the Westward Movement, the top half of the fifth grades will be introduced to a book like Evelyn Lampman's *Tree Wagon*. The slow readers might hear about *Young Mr. Meeker and his Exciting Journey to Oregon*, by Miriam Mason.) The children also hear poems and stories read aloud, and, under the librarian's guidance, check out books for leisure-time reading. In addition, they are taught the use of the library and of reference tools.

Since the top half of a class will necessarily include many who are just about average in ability, these library visits cannot be geared exclusively to the superior child. To accomplish *this*, Special Literature classes have been set up in many schools. These sixth grade classes are the culmination of the appreciation phase of our total reading program. It is about these classes that I wish to speak today.

Our Special Literature program was begun in September of 1946 on an experimental basis in several elementary schools. Since that time, it has become an integral part of the reading curriculum, and this year there were over fifty groups functioning. Each one is under the supervision of the librarian and a sixth-grade teacher. These two meet weekly to plan working schedules and assignments.

The children are chosen for this class on the basis of I.Q., reading interest, and social maturity. In addition, each must be reading at least one year above his normal grade placement, and must have ample time to read outside of school as well as in class. (Incidentally, because we are concerned with the near-superior as well as those with the highest I.Q.'s, these classes often include more than just our V.S.P.'s.) A meeting of the principal, counselor, librarian, and the sixth grade teachers is held in the fall to select those who will participate. The number is usually limited to fourteen. The parents are then informed and asked for their cooperation.

A weekly schedule is set up somewhat as follows: To make certain that growth in the usual reading skills is not neglected and to keep him in touch with his fellow classmates, each child spends his reading periods two days a week working with his regular group in his classroom. This is usually on Mondays and Fridays. One period a week, on

Tuesdays, he meets with the librarian to be introduced to a new area of literature, or to be stimulated to read about its various phases. At this time he also checks out the books he needs. On another day, Thursdays, he spends his reading period with the sixth-grade teacher who is working with the Literature Class. (This is while her own regular class is visiting the library.) Here, in a free, permissive atmosphere, he discusses with the group what he has been reading. The teacher guides this discussion, helping the children to consider social-economic backgrounds, literary quality, character development, plot, etc. She points out excellent and poor bookmaking, and acquaints them with the lives of authors and illustrators. She oversees the making of projects, and helps the children keep notebooks where they record comments on the books they have read. The other remaining day, Wednesday, the pupil reads the books he has checked out from the library. He must also spend at least one hour a day outside of school reading. And here is where the parents' co-operation is most often needed.

The six general areas of literature we cover during the year's time are: Modern Award books (the Newbery, Caldecott, and Carnegie Awards), editions and translations, folklore, biography, poetry, and non-fiction books on individual interests. The length of time spent on each varies, but is long enough so that the children can become familiar with the area's background, its terms, authors, and literary atmosphere.

Reading the Newbery Award books and their runners-up is invariably an enjoyable experience for the children. Although the award was first given in 1922, "for the most distinguished contribution to American literature for children," most of the stories still ring true. For the perceptive

child they afford the opportunity to "see life" through the eyes of many different children. For example, he may gain an appreciation of the social situation of a migrant worker's daughter like Janey Larkin in *Blue Willow*. Or, he may get an insight into how poor Wanda Petronski felt when she claimed she had a *Hundred Dresses*, though she never mentioned they were all the product of her paint brush. He may come to realize the emotional conflicts of the handicapped through reading about *Johnny Tremain*. The struggles of the fearful child to try to gain self-confidence are vividly portrayed in a book like *Call It Courage*. Then, too, our gifted reader may vicariously overcome great obstacles as he watches *Amos Fortune: Free Man*, the Negro who worked long years to free himself and other slaves. *Dobry*, *The Good Master*, *Young Fu of the Upper Yangtze*, and *The Wheel on the School* will show him that children all over the world have different ways of life, and they are good ways, too. He may see differences right here in our own country, in its various locales and cultures, in books like Lois Lenski's *Strawberry Girl* or Laura Armer's *Waterless Mountain*. To identify himself as a member of a close, happy family is always a good thing for a child. *The Moffats* or *The Little House in the Big Woods* will give rich experiences in this.

A perspective, not only for life today, but also for the past is gained when the superior reader gets an overview of history in Van Loon's entertaining *Story of Mankind*. There are other books too, which acquaint him with the past, books like *Hitty*, *The Dark Frigate*, or *Adam of the Road*. And of course, for sheer fun there are books like *The Voyage of Dr. Doolittle* or *21 Balloons*. Yes, the Newbery Award books are filled with rich, deep, experiences. They never fail to stimulate thought and discussion as well as to thoroughly entertain our superior readers.

So we will not seem too provincial and in order to widen their appreciation of literary style, we also acquaint these children with the Carnegie Award books. (This award is given to the British subject domiciled in the United Kingdom who has written the most distinguished book for children of the preceding year.) The three which my children seem to enjoy most are *The Borrowers*, *The Three Little*

Grey Men, and *Radium Woman*.

Naturally, we hope that reading these books will be a subtle means of developing human understandings, but we also hope it will develop standards for comparison with other reading materials. A real appreciation for outstanding story content and literary style should be the outcome.

As a first or second grader, he once spent many happy times browsing through or hearing them read aloud in library visits. Now, as a superior reader, he comes to look at picture books with a new purpose. So he will become aware of the importance of good book illustration, we make a real study of the Caldecott Award winners and their runners-up. (Incidentally, this award goes to the artist who has produced "the most distinguished American Picture-Book for children.")

After looking through those books that have been illustrated by outstanding modern artists like Lynd Ward, Leonard Weisgard, and Leo Politi, the child is shown that different media and methods produce different moods. He learns that the good artist always attempts to achieve the most harmonious union of picture and text possible. From this, the child realizes that the general format of a book can add or detract much from the reader's enjoyment.

We also study some of the work of early illustrators,

artists like Randolph Caldecott, (for whom the Award is named), Kate Greenaway, Sir John Tenniel, and Howard Pyle. The contrast between early and present-day illustration is striking. The children can't help but see how books have changed through the years.

Another area of literature which points up differences in bookmaking is our study of editions and translations. Here the emphasis shifts from illustration to general format and literary style. Various editions of well-known books, like *The Adventures of Tom Sawyer*, *Little Women*, and *Treasure Island* are read and compared. Good and bad points in bookmaking are noted. Is the paper too thick? Too shiny? Is the printing even? Are the margins and spacing pleasing to the eye? Do end-papers and illustrations enhance the book? Do they fit with the text? (Incidentally, I'm constantly amazed at the large number of children's classics that do not come up to standard!) Then abridged and unabridged versions are discussed, raising the question of literary style and its importance in a book. All this helps to develop a discriminating taste.

Translations of famous books from other countries are also read. The children have never before realized that such favorites as *Bambi*, *The Adventures of Pinocchio*, and *Heidi* were originally written in another language, becoming so popular that they were translated into English for our enjoyment. This can easily lead into various "sideline" interests like a study of foreign languages or the customs of other peoples.

"A lie, a tease, and a little bit of the truth . . ." That was one boy's discerning definition of a fairy tale, and because fairy tales are just that, children have always loved them. We have found that it's easy to "sell" folklore.

For the purposes of our program we divide all of this literature into two parts: Part I are fables, folk tales, and modern fairy tales. Part II comprises myths, epics, and legends. At some of our schools, Part I forms the basis of reading for a special extra group of superior readers drawn from the fourth and/or fifth grades. Then the second part is reserved for the regular sixth grade Literature Class.

In Part I we try to make sure that the children understand the differences between the fable, the folk tale, and the modern fairy tale. We acquaint them with the major compilers, like Joseph Jacobs and the Grimm brothers. Then, since every place in the world has produced its own folk tales, we have the children read stories from as many countries as possible. This points up the large number of variants based on a single theme. Then we discuss how this has come about, that so many similar stories exist in so many parts of the world. We see the differing temperaments and characteristics of the peoples where the stories originated, and we note the effect climate and geography has had on their folklore. (This area, by the way, affords an excellent opportunity to build a "one world" feeling.) The titles which might be used here are very numerous and generally available.

Part II of Folklore includes Greek, Roman, and Norse myths, epics like *The Aeneid* and *Beowulf*, and legends or tales of chivalry, like the stories of King Arthur and Robin Hood. This is somewhat heavier reading, and explanations should be made to acquaint the children with historical background so that they'll understand the social conditions which produced the literature. We hope that through their reading the pupils will understand many literary allusions in use today and will gain a knowledge of the art, music, and architecture of ancient and medieval times.

In gaining an appreciation of history, no literary area is as fruitful as biography. While the child learns about the lives of great men and women in every land and time, of every race and creed, while he learns of their dreams and ideals, their struggles and successes, yes, and of their weaknesses and failures too, he is also learning, perhaps unconsciously, something of the cost of world progress. He also begins to adopt as his own, those ideals and attitudes of the men he most admires. He begins to see how the achievements of one man affect the lives of those about him as well as those who come after him. These are the "hidden fruits" of this study. Needless to say, we never set out deliberately, overtly to gain them. We merely make the right books available and try to guide the child's thinking as he discusses these biographies with us.

Altho we do not set out to get 'hidden fruit,' we do try to make sure that the children become acquainted with some of the most important contributors to *our* nation's progress as well as the world's. We like them to read those fine biographies for children which tell the life stories of our major presidents and statesmen. There are good books also on our trail blazers, men like Boone and Lewis and Clark, women like Narcissa Whitman and Sacajawea. Our artists, authors, musicians, and scientists are represented through books on people like Benjamin West, Louisa May Alcott, Stephen Foster, and Dr. George Washington Carver. We also want them to read about many others too, doctors and nurses, humanitarians and patriots, Indian chiefs and educators, inventors and naturalists, newspapermen and religious leaders, all who have added so much to our national life in their own particular way. In reading these biographies we hope the children will see the very wide range of individual contribution possible in human endeavor. In addition, we point out

that accuracy, gained through careful research, is a very necessary part of the biographer's art. This the children learn as they are introduced to the different types of biography: individual, collective, fictionized and autobiography.

Many outstanding biographers write especially for children. Among them are Jeanette Eaton, Shirley Graham, Clara Judson, and Jeannette Nolan.

Perhaps the most difficult area of literature to introduce well is poetry. Why, I don't know, except that too few of us made a happy acquaintance with it in our own childhood. As a result, we're unable to give it the enthusiastic introduction it really deserves. I do feel, however, that a conscientious search for his "favorites" can lead almost anyone to a real appreciation for poetry.

I believe it's best to put this study somewhere midway in the year's schedule, not first because of its difficulty, and not last so favorites can be brought in from time to time and shared with the class.

In introducing poems it is always best to read them aloud. This should be skillfully done, and if you cannot seem to master the art, there are a number of excellent recordings which will serve instead. We begin with poems which illustrate several outstanding forms, forms we think the children will most enjoy. These include: the old and modern ballad, the narrative poem, the limerick, the simple lyric, and free verse. The limerick makes a good first impression, "breaking the ice," as it were; — it is a natural with children, with its quick twists of humor. (Lear's caricatures help too.) Old ballads often have appeal because of their dramatic themes, but the old English must be explained. Familiar poems, like Joyce Kilmer's "Trees", can serve as examples of the simple lyric, while the story itself carries

along narrative poems like "Paul Revere's Ride." Psalms taken from the Bible show the flowing rhythm and lack of rhyme in free verse. And, for contrast, "Casey Jones" will illustrate the modern ballad.

Searching for his "favorites" among these forms, the child may well come to a real enjoyment of poetry.

A child's interests widen as he grows. It is important that he enlarge his reading "diet" too, so that he knows books as sources of information as well as delightful companions. Hobbies to pursue or subjects for further exploration are often discovered in non-fiction books. Consequently, his leisure time may be filled with happy activity and eager learning.

Those books and materials which might be used in this area called "Individual Interests" are extremely numerous. There are few things from Art to Zoology that are not interesting to at least one superior child in a group of, say, fourteen. Moreover, quite a few of the books, magazines, and pamphlets written for adults are also suitable for these readers. The intensity of the child's interest, his reading ability and background form the basis for book selection here.

Naturally, there are differences in choice because of sex. Girls like books on cooking, sewing, dancing, manners, fashions, etc. Boys prefer sports, nature study, science, aviation, and the like, but both sexes may develop a genuine interest in many subjects mutually, especially where plans for a life work are being gradually formulated, or at least explored.

Innate talent is important here also, for many times the superior child has exceptional ability along special lines.

This should be recognized and the child introduced to materials which will extend and enlarge his interest in those areas.

I have found it advantageous to schedule this study last of the six, near the close of the school year. The child then may continue to 'explore through reading' during the summer months, using the Public Library.

We undertake many projects in the various areas during the year's time. This is done to enliven the program and to keep it from being too verbal. Although these projects are often suggested by the teacher, many times they are student-initiated. In either case, there has to be much careful planning to make them as profitable as possible. Working as partners or as small committees gives an opportunity to develop social skills. This also helps to bring isolates into the group and to build up associational ties, all of which is important where children are drawn from several different classrooms. (Above all, we want them to be happy while they are in this program!) Projects, such as puppet shows or debates, often serve as one means of sharing what the Literature group is doing with the boys and girls in the regular classes. Over the year's time, activities that call for a variety of skills are chosen so that every child will find at least one in which he will do well.

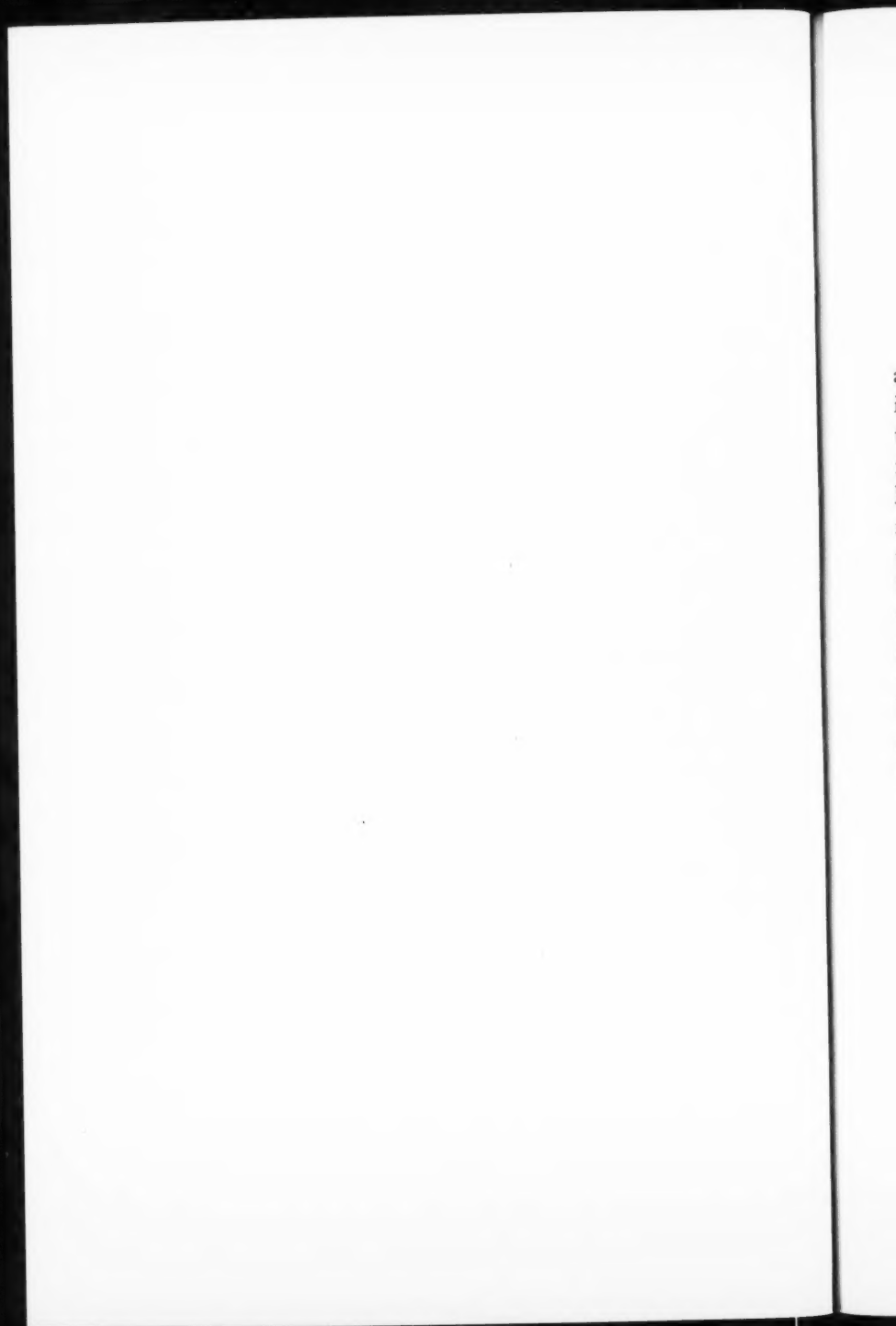
When we've finished our year's program, there are many questions we ask ourselves, questions like: Do the contributions of these children in their regular classroom work reflect definite gains made from participation in this special program? Have the children really enjoyed the stories? Has their range of reading-interests increased? Do they seem to relate reading to their own daily experiences? Does it seem to broaden their understandings of people?

Have their American ideals been strengthened? Do they have a sense of belonging to a world community? The number of positive responses that can honestly be made to these questions are usually many.

Naturally, the major gains in a program of this sort must necessarily be of a subjective, rather than an objective, nature. Administrators, teachers and librarians connected with it have been aware of many outcomes that are not measureable, such as an appreciation of world literature, a discrimination in literary taste, and a growth in spiritual qualities. Parents, as well, have been most appreciative, and the few objective tests that have been made have shown significantly favorable results.

However, when we look back over the past eleven years and take an overview of the program, we are aware of several phases where additional planning is needed. For instance, we hope to develop more adequate standards for the selection of the children who will participate. We have found too, that the total program needs expanding, both upward and downward, and various experimental groups in a number of schools are exploring ways to do this. In addition, we will soon be revising our Guide, bringing the bibliographies and the audiovisual lists up to date and including many new enrichment practices.

In the light of this evaluation, we realize there is still much to be done. In the meanwhile, however, we are striving to fill the special needs of our gifted child, providing experts to guide him and giving him many opportunities to read widely in a variety of literary areas. This should better enable him to take that place of leadership in our American democracy which his innate abilities make possible. As the theme of this conference suggests, he will have had many experiences in "creative living".



Reading and the Creative Life

DOUWE STURMAN

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The rhythm and cadence of any speech such as I am about to make often has a familiar ring. One of the pleasures, indeed, of listening to anyone talk is to listen to the overtones which belong not so much to the speaker as to his family, his community, his land, his people, his time and his age. One of the nicest lines in Homer is the hospitable recurrent question, addressed to all strangers, "Who are thy people? Where is thy city?" We like to think of a human being as having a background, and we like to hear the human voice against this background, with its passages and places, its silences and echoes. When, for example, in Venice for the first time, we hear a rhythm and cadence never heard before, what we enjoy is the human voice set against a background not of screeching motor cars but of water lapping and of boats gently bumping against padded bulwarks. Even when the overtones are of a rhythm and cadence more difficult to spot—"the older, colder voices of the sea," or the mysterious melody of "the drawing of this love and the voice of this calling"—even then we can trace back the tears in the throat of the speaker to the *lachrymae rerum*, to the weeping for the unknown darker side of life.

In Ramah was there a voice heard
Rachel weeping for her children
And would not be comforted
Because they are not

The words and images and sounds drift down upon us, like a steadily falling snow, surrounded by a gathering dusk, "like another darker snow."

What I have said concerning speaking can also be said concerning printed word reading. Just as the speaker brings with him the vast orchestration of the voices of his background, so the reader brings with him to the act of reading the entire body of his own experience. We as readers may not be aware of this, any more than the speaker may be aware of his background. Our attention may be so focussed on what we are reading that we are unaware of anything else—indeed, we seldom are self-aware at the moment of concentrated reading. But the truth remains, nevertheless, that we bring more to the book than we get from the book. We bring our private madness to the reading of *Moby Dick*, our own suffering to the story of the man of sorrows. The book, if successful, merely seems to make possible the experience of reading, but in no wise is the whole experience. We see too often the pathetic spectacle of the gross and untutored person trying to acquire culture by buying books and the objects of art. But all art, including the art of reading, is made up of a combination of subject and object, of reader and book, and as a result each experience is intrinsically unique, inherently limited to the individual, and therefore incapable of export or import. It is like the good life, which cannot be reduced to a set of rules and principles, to be acquired with acquisitive greediness and exported with evangelical fervor. The artistic life like the good life must be lived out in the quiet of one's own experience, in what Sherwood Anderson once called the living small.

But though the act of reading is unique for each individual, and is best accomplished in the living small, yet the experience of reading is not itself small. Our attention may

be focussed and pinpointedly minute, and the object of our attention pinpointedly small, but what we bring to our reading is infinitely large and abundant and complex. We may, as I have said, not be aware of what we bring, and the chances are we will not be, but nevertheless we are making the contribution. Much of what I am saying this morning, for example, will have a familiar sound, just because it is about this unconscious material which we bring to our reading but of which we are normally unaware. We become aware of it only if we deliberately and intentionally, as now, analyze our reading experience. Otherwise we are apt to project, and attribute to the book many of the virtues that rightfully belong to ourselves. On this account I emphasize reading rather than books. Many a man with a magnificent private library has no more to do with culture than does a bookdealer who merely traffics in the art of selling.

Reading is a combination of book and reader, and the art of reading is something that must be learned anew by each individual. The experience is inherently unique. But what gives this uniqueness its value is not its novelty but the fact that it is also creative. Through reading we enter into a world that never was before—in fact, a totally new creation comes into being as we read. We walk where no one ever walked before, in a world new and strange.

This new world with which the reader becomes acquainted is characterized simultaneously by strangeness and by familiarity—familiarity because the material is uniquely his own, strangeness because the material has always till now resided in the dark and mysterious depths of his own being. Reading is a creative matter of growing self-awareness, of becoming acquainted with the vast domain which is the dwelling place of each individual.

But this process of self-discovery is sometimes frightening. What is in the dark of our own being is often there because of an original fear—fear of an overwhelming question we had hoped to avoid, fear that we are inadequate to deal with certain thoughts and feelings that clamor for recognition—and as a result, when in an unguarded moment, such as in unselfconscious reading, we suddenly come upon these thoughts and feelings, we have the same sense of fearful destiny that overtakes lovers when, in a quarrel or in anger, they say things that only tomorrow will prove painfully true.

"How do I know," says the Professor, "what I think until I have spoken." "How do I know what I feel," says the lover, "until I have loved." "How do I know who I am," says the reader, "until I have read." Through reading we become acquainted, frequently for the first time, with what is within us. And this, as I have said before, is often a perilous process. "My dear one is mine, as mirrors are lonely." And what is true of the isolation of lovers is even more true of readers. We can share things, and even books, but we cannot share our reading experience. It is and remains a lonely performance—the loneliness of the creative moment.

This inability to share our reading experience, this inevitable loneliness of the life of the spirit, is not, however, the whole story. If it were we would all gladly give up our individual existence, our right to go our own way, and would gladly return to the undifferentiated mass of the community, the amorphous amalgam of the tribal experience. But there is another and saving truth. In addition to the loneliness and the fear there is a sense of the fullness and of light. This is essentially what creativity is—it is the bringing into the light of what was formerly in the dark, the giv-

ing of form where formerly there was none, the sense of fullness where once there was the void. "And the earth was without form, and void; and darkness was upon the face of the deep . . . and God said, 'Let there be light' . . . and God saw that it was good."

Reading, then by very definition is creative, if we allow it to be so. By noting what happens in the act of reading we finally become acquainted with ourselves. Through reading we get beyond the ordinary confusions and projections, we reclaim all that once belonged to us, we introject and reintegrate all that we once lost to the world about us, and we arrive at that final illumination of our essential nature which is our goal. "Art is the rendering visible of that true nature which we trample underfoot but which continues to abide within us." All that is in our hearts and minds, even the darkest secrets most carefully guarded from ourselves, in the creative act of reading flow forth in a steady stream — nourishing, revivifying, eternal. This is the river, the streams whereof make glad the city of God.

The dark continent which is the inner unknown landscape within each one of us, the unknown country which is our native land but whose native songs we have forgotten, has its own rhythm and cadence, and when we accidentally hear its songs and accents, we experience all the pleasure of the exile who on a distant shore hears his native speech again. Actually we remain in touch with these hidden melodies all our life, but only through the creative act of reading do we redeem them and learn to sing them at will.

By the waters of Babylon
There we sat down, yea, we wept
When we remembered Zion.

But how does one go about remembering Zion, how does one learn to read creatively and redeem the land lost in our time of exile?

The answer is simple, and to some shocking, for we redeem the land, we rediscover Zion, through suffering—where suffering means, not senseless agony, but the permissive attitude of the mind which tolerates all. In ordinary hours we are not creative. The ordinary consciousness knows nothing of the reality that lies hidden beneath everyday life—and to acquire a true knowledge of things we must be willing to destroy the comforting familiarities of everyday existence. Habit and routine, says Proust, can become a sort of second nature, preventing us from knowing our original nature with its cruelties and enchantments. Consciousness is often limited to this second nature, while our faces and voices often unconsciously reveal a pain and a wisdom that our ordinary consciousness does not know. Our reading, too, often unconsciously permits us to return to that native land for which we are always seeking, toward which we are always moving, albeit blindly like the mole “beneath his pilgrimage of domes.”

The enlarging of our consciousness through reading, through suffering, is achieved in many ways, some ingenious, some not, but all aimed at outwitting the restrictions of ordinary consciousness. One of the simplest devices is to read early in the morning, while still in the presence of the eternal world of dreams, before the false day has begun with its problems and preoccupations. Once the day has begun to weave its gordian knot of time, shuttling back and forth between past and future, drawing the knot tighter by its monotonous rhythm, it becomes impossible to create a pattern of life in which the extra-ordinary is permitted to take its place beside the ordinary. In Thornton Wilder's *Our*

Town, for example, the little girl returns to relive the happiest day of her life, only to find it ruined by sheer ordinariness. Nobody really notices her, nobody is really present. Everyone is preoccupied, bypassing the present and looking over its shoulder at the past or the future. There is infinite sadness in the little girl's cry, "Daddy, please look at me."

Reading is our chance to look at ourselves, to see what we are at any given moment. This takes courage. It takes compassion. What we don't know concerning ourselves, what is in our unconscious, is largely there because it is made up of darksome fears, and, says Auden, these children of the night need our love too. "Follow poet, follow right to the bottom of the night," and trembling we take the silent passage into discomfort. In the words of Dylan Thomas, we travel toward the ambush of our wounds, down the silent road to ruin we must run. There is no other creative way.

In conclusion I would like to say that, however we look at it, the amount of life we wish to redeem is in our own hands. We can live removed and monotonously, as though we were a musical instrument rendered silent by the uniformity of ideas and ideals, or we can live creatively giving free rein and full recognition to the irresistible forces of life within us.

Exiled in us we arouse
The soft, unclenched, armless, silk and rough
Love that breaks all rocks.

And it is through reading that we do this. Books release the life energies that flow forth and give meaning to all this "mapped and blossoming earth." It is only when life's energies are low or dying that we are content with the soothing virtues of monotony. When the dawn of a new day

comes, "The heartstrings, like a harp laid by, yearn to be plucked and sounded again, by some hand, even a brutal hand." We are then spelled awake by a sound that takes us to the edge of our own world, and this is the creative process, the promise of the creative life.

Impetus of the Library Region on Reading

BY RAYMOND M. HOLT

Librarian, Pomona City Library

It was scarcely 9 o'clock on a bright summer morning when Mr. I. C. Morebooks opened the door to his palatial office suite high in the city's most impressive skyscraper. Turning over a new leaf on his calendar he exposed the fresh page for July 9, 1967. The inter-office video screen suddenly brightened in front of him as his secretary, Miss Systems, announced, "Mr. Ned Morrow is here for your TV interview."

"Send him in," Mr. Morebooks responded.

Quickly setting up his portable TV equipment, Mr. Morrow settled into the usual interview routine.

"Mr. Morebooks, our audience is extremely interested in the incredible rise of this firm which you call 'Library Organization for Total Service', or as it is better known, LOTS. Could you tell us how it all started?"

"Yes, indeed," Mr. Morebooks spoke willingly. "As every student of business knows, there was a period back in the 50's when young business executives were looking for new fields to conquer. While many were absorbed in various governmental posts and in the expansion of business and industry, a few of us looked around for something different. At that particular time, people seemed most dissatisfied with certain services rendered by governmental agencies. Much of this criticism was unjustified, of course. However, some agencies seemed to invite, and deserve, the harshest sort of criticism."

"And please tell us how you identified such a service," Mr. Morrow interrupted.

"Why, by disorganization! Actually," Mr. Morebooks continued, a bit impatiently, "it was really quite simple. First you found something which people wanted. Second, you investigated how such a product or service was produced or rendered. Then you chose the one which showed the poorest organization and, therefore, the greatest opportunity for exploitation."

"Are you saying you exploited the library field?" Mr. Morrow questioned with raised brow.

"Only in the best sense of that word," Mr. Morebooks hastened to reply. "In most instances where private enterprise invaded fields of government service, as I am convinced was true in the case of public libraries, the very fact that there was disorganization indicated eventual disintegration and failure."

"What, then, was the public library situation in the 50's, Mr. Morebooks?"

"Basically, public libraries were performing the same services in the same way as they had done over a period of nearly a century. Few real improvements had taken place. Oh, there was lots of talk about them—conferences, workshops, and so on—but actually little had been done to make use of automation, the skills of public relations experts, and the so-called electronic brains."

"Were people unhappy with this state of affairs?"

"Well, that's hard to say," Mr. Morebooks said cautiously. "After all, the public does not always know what's best for it, and sometimes they have to be enticed a little

bit—you know, shown what a good thing they could have by spending a little more effort and money.”

“Well, now, tell us about your organization. What sort of thing does LOTS do?”

“The Library Organization for Total Service,” Mr. Morebooks began, “was set up to furnish services and materials which, until the late 50’s, were supposedly provided for by the public libraries of this country. In fact, in many areas few people realize that a change has taken place . . . except, of course, that there has been a tremendous improvement in their libraries.”

“What was your first step in taking over the public libraries, Mr. Morebooks?”

“Well, even to suggest that there was a first step is misleading,” Mr. Morebooks reflected. “There had to be a wholesale reorganization of libraries to cut out the unnecessary duplication of services which, of course, was one of the things strangling library service in the 50’s. Next, we had to place into operation a complete public relations program. While most people in every community felt that a library was a good thing, few people actually found any use for it in their own personal lives. It was quite evident that if LOTS was to be successful at all, people would have to be sold on the product, and this meant an all-out public relations effort, using every possible advertising media.

“And, of course,” he continued, “the third phase of the program was to utilize all mechanical and electronic devices which could be adapted to library work.”

“How could you be successful in doing this when librarians had failed?”

"We had the advantage of business organization and know-how!" Mr. Morebooks explained. "We didn't have to have a national conference over changing punctuation or spacing on cards, or an international agreement on how to check out a book. Simply a matter of executive orders and discipline in the ranks. To get professional people we merely paid higher salaries. Of course, this cost a little bit more, but it paid off in greater efficiency. With private capital, we had no difficulty getting modern buildings, and our advertising and public relations program brought customers by the millions, all glad to pay the service charge, too. Like joining an exclusive club, there's a real prestige factor in belonging to a library now," Mr. Morebooks chuckled.

"What, then, would you ascribe LOTS's successful invasion of the public library to, basically?" Mr. Morrow asked.

"That's an easy one," Mr. Morebooks surmised. "On the failure of libraries to organize and do for themselves what LOTS has done."

"Did they ever have the opportunity to do this?" Mr. Morrow inquired.

"Why, yes, they did. As a matter of fact, the seeds of such a program were sown back in the 30's when it was first fully realized that library service was not all that it should be, and that to gain adequate finance, unnecessary duplication had to be eliminated and larger units of service provided. To implement this, an attempt was made to regionalize libraries by forming legal combinations of counties, or county and city areas. The first of these occurred in Louisiana in 1930. By 1950, I believe, there were some 48 regional schemes. Some states had gone so far as to divide into certain geographical areas."

"Well, why didn't this succeed?" Morrow asked.

"Very simple," Mr. Morebooks replied. "Regionalization through political combination is practically impossible. The barriers of county and city boundaries, to say nothing of state boundaries, are nearly impassable. Of course, the idea was given some backing. Carleton Jockel and Amy Winslow, two great librarians of that era, wrote a national plan for public library service based on regionalization. Gretchen Schenck reviewed the situation early in the 1950's in her book, *County and Regional Library Development*. In fact, library literature contains a lot of information on the subject. Experimental regional programs sprang up in Tennessee, Louisiana, New York, and elsewhere. Finally, in 1956, new standards of library service were prepared by the American Library Association, based on the concept of larger units of service. But, as I said before, they failed because necessary political consolidation met local inertia and a rigid desire to retain local identity and autonomy. There wasn't even enough enabling legislation and certainly little encouragement from state and federal agencies. Librarians, themselves, misunderstood and mistrusted the purpose of regionalization, and there was a lack of personnel to direct the program. Finally, the public grew impatient because services they wanted, services they needed and felt should be available, were not supplied. That's when LOTS took over!" Mr. Morebooks concluded.

"Sounds almost incredible," Mr. Morrow summarized. "Wasn't there any alternative? Were public libraries doomed to die in this fashion?"

"Perhaps," Mr. Morebooks reflected. "There *was* a suggestion by Dr. Robert D. Leigh, of Columbia University, that some librarians felt made sense. In fact, a few of them

made an attempt to follow his plan. Perhaps if it had been carried out completely, public libraries could have survived instead of being taken over by private enterprise."

"What was this idea?" Mr. Morrow inquired with interest.

"As far as I know, it was first set forth by Dr. Leigh at a meeting of the California Library Association in San Jose in 1955. In a speech there he traced this movement of regionalization and noted that it had failed because of the inability of political units successfully to combine. In its place he suggested a more devious route which he called 'Cooperative Regional Plan'. Working under such a system, libraries would have pooled resources and developed their facilities cooperatively while preserving their local identity and autonomy. In other words, as an example, several libraries might have voluntarily contracted with one of their number to carry out the acquisition, cataloging and processing of books. They might have contracted among themselves to set up a film circuit, or a book depository, or any number of other similar joint services. Dr. Leigh even thought that personnel might be shared and library services thereby expanded."

"What happened?" Mr. Morrow asked with great interest.

"Oh, what you might expect to have happened," Mr. Morebooks shrugged. "The usual inertia, petty jealousies, misunderstandings, inability of people to see a common vision, a fear of the unknown . . . all of these things hampered their efforts. Strangely enough, in California a beginning was made through a loose-knit program which began with a molecular grouping of libraries to discuss ways of using library standards. But most of these never met more than

once or twice. Then they found that pressures from their own daily jobs and suspicions over one another's motives prevented them from continuing their cooperative efforts. So today, instead of a system of cooperating public libraries, we have LOTS, a great business venture which utilizes all of the new techniques to bring more people more material on more subjects."

"What's your next move?" Mr. Morrow asked.

"Having consolidated our position in the public library field," Mr. Morebooks said enthusiastically, "we are now entering the fields of school and academic libraries. Naturally, we hold many advantages in our organization. Each institution has its materials pre-selected, cataloged and processed. Not only are the resources of the particular library available to the student, but all of the resources possessed by our firm, LOTS. In one simple contractual agreement the school or college eliminates all of the fuss and bother formerly associated with academic and school libraries. True, it may be a bit less personal, and professors might often have difficulty in getting their favorite books on the collateral shelves for a long period of time. Nevertheless, we have been able to reduce greatly the total cost of library services. In fact, the colleges and universities are supplying us with real depth in materials and our public library section is giving valuable assistance in provision of readers' services."

"Exactly!" Mr. Morrow exclaimed. "Since libraries have failed to meet the problems, there's nothing that can stop us!"

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To many of you I am sure this has been a rather over-drawn picture of library service a decade from now. How-

ever, I am convinced that unless some definite steps are taken in the very near future effectively to increase the utilization of library resources, to combat the growth of unnecessary duplication of services and materials, and to take full advantage of mechanical and electronic equipment, some radical change must come to the library field. Certainly, no competitive business could long survive if it operated under the conditions prevailing in libraries today.

The total resources of all libraries in the United States today is estimated at some 150,000,000 volumes. Circulation of this material amounts to some 400,000,000 items. It sounds like a great deal, but how much does it actually represent? We know that only 16% of our population are registered borrowers. We know that libraries buy only 5% of the books published in America. These represent a meager 12% of the money collected by publishers each year. There can be no question but what the impact of the library must surely be all out of proportion to these figures. Yet, I am also convinced that we have not begun to see the effect libraries could exercise in today's world. The question then rises: How can library services be improved? To put it more simply: How can books and all communications media, which are basic to creative living, be made more accessible to the reader? I am now concerned with all kinds of libraries . . . public, school, academic and special libraries.

If the library were an organism which could be placed under the microscope and dissected, a number of features would be immediately apparent. First, the library is a warmly human organism devoted to the task of bringing people and knowledge of the ages together. The evolution of the library seems directly related to, and dependent upon, educational status. The higher the general level of education, the

greater the use made and greater the need for the library. Industry and business in the past few decades have found that to succeed they, too, need libraries, and therefore, special libraries have come into their own. Yet, this library organism seems strangely out of tune with its time. While their stock-in-trade is communications media, libraries themselves employ the poorest sort of communications for their own use. In an age where an institution must organize to survive, the library world attempts to perpetuate itself in a disorganized fashion, with each kind going its own way with little thought for the effect upon the remainder of the body.

Although containing volumes of information on all that is new in the field of public relations, the library organism has done little to acquaint its own public with its basic purpose and services. While its own shelves are crowded with materials enabling business and industry effectively to utilize the latest in automation and electronics equipment, the library itself goes little farther in mechanization than substituting typewriter for pen. No business would long exist in the competitive field if it did not require production . . . that is, getting the most out of each unit of input. But libraries continue their age-old habits, seldom stopping to analyze the cost and effectiveness of such basic things as cataloging and classification.

Business and industry employ top-notch professional people, pay them good salaries, provide them with adequate clerical staffs and mechanical equipment in order that they may produce. The library struggles with low professional salaries and then harnesses the professional to a host of routines, often clerical in nature, and frequently of questionable need and potential value. Industry, to exist, must confine itself to those processes which create, distribute and sell

the end product. Libraries have not as yet concentrated their efforts to this extent and, therefore, have failed in exerting their full power.

The first step, it seems to me, that libraries must take to find their rightful place in society, is to understand their objective, as described in "Public Service Standards of the American Library Association." The second step is to increase greatly their effectiveness through cooperative pooling of resources and services. This matter of objective was illustrated, for me at least, by a statement made recently by Coit Coolidge of the Richmond Public Library in an article, "Dynamic Librarianship," published in the July 1957 issue of the CALIFORNIA LIBRARIAN. He said,

"As librarians we deal with the product of the human mind. Our general function is to evaluate it, to store, to preserve, to arrange, and to do all things to make it readily available for use.

"As public librarians, we have the added responsibility of building our own collections and of achieving the widest possible dissemination of the best ideas.

"We seek to supplement the formal education of schools at all levels. When the candle of interest has been lighted by the superior teacher, the library seeks to feed the flame by supplying intellectual fuel in judicious amounts.

"In this country, where we find the spectre of regimentation walking the streets in many forms, we librarians still deal with individuals one at a time. The free public library is one agency in the community which still is organized to deal with individuals on an individual basis. In this effort we may become one of the last refuges of the free American . . . a strong bulwark against the regimentation of thought."

Proceeding from this concept, it is inevitable that librarians must think in terms of total resources and total services. Formal regionalization has proven difficult, if not impossible. But regionalization may be achieved through

voluntary cooperation. Through such organization libraries can mass their resources, their services, providing collections of materials and services to readers heretofore undreamed of in any but the most well financed institutions.

Now, I am quite aware of the opinion expressed by many librarians that voluntary cooperation is doomed by the very nature of the differences existing between libraries. I agree. Cooperation cannot be approached through our differences as libraries and types of libraries. But I am of the firm conviction that all libraries share a common rootstock which can and must prevail.

Marriage, which is largely a matter of voluntary cooperation, would be impossible if the partners attempted first to discover all the incompatibilities rather than share and build together their common interests. Concentrating their attention on areas of agreement and similarity of interests enable the marriage partners gradually to strengthen their union to face and overcome their differences . . . differences which at first might have loomed insurmountable.

Likewise, cooperation among libraries must begin with sharing similarities rather than differences. The fact that each library varies in the details of its classification and cataloging is a minor point when considering a cooperative cataloging or processing center. The important thing to consider is that *all* libraries do classify and catalog their materials. Beginning at this point, there is now reason why, through a series of compromises, an effective cooperative move could not be made.

I have heard that cooperative efforts would fail in the area of circulation because of the multitude of varying rules, regulations and kinds of charging systems. Yet, the impor-

tant thing, again, is not the differences, but rather that *all* libraries must provide some sort of circulation system.

It also occurs to me that Mr. Taxpayer is primarily concerned with getting the most from his tax dollar. Because unnecessary differences are expensive, I believe libraries will have a strong argument for increased funds when librarians move toward eliminating such differences, improving effectiveness of operation and increasing public services. However, since our goal seems to be the individual, how does this affect him? There is no intrinsic value in creating a super-organization if its goal is only self-perpetuation. We have all seen examples of purposeless machines, and suspect that certain governmental agencies are no better conceived, but we do have a goal . . . that of serving the individual as an individual and, therefore, the value of cooperative effort must be judged as it affects the individual reader. This individual is highly important, and I believe that in a society as complex as ours we dare not limit him solely to those materials immediately at hand in his particular geographical area. Leadership and participation in community, business, and national affairs must be fully informed whether it is found in the smallest hamlet or the largest metropolitan center. We are as obliged to meet the intellectual, cultural and recreational needs of the youth at a cross-roads community as we are his counterpart in the wealthy city.

The effect of the cooperative region on the individual can be summed up in rather a simple manner. Through the pooling of material each reader will have available the total of library resources. Because he can find what he sets out to seek, this will stimulate the reader's interests and effectively help him to take his place in society. It is not unreasonable to believe that someday soon a borrower may ask

a question in some outpost of the library system only to find that instead of trying to locate the answer in the limited collection immediately available, the librarian transmits the request by a communications device to a large regional center. Here an electronic brain, with a prodigious memory encompassing much of the recorded knowledge of mankind, is placed into operation. Through its complicated process it sorts, discards and shortly emerges with a list of materials available to answer the question. Next, a new kind of inter-library loan system, utilizing closed circuit TV, facsimiles, reproduction and other equipment common to business and industry will take over and quickly assemble from a variety of sources the complete information and place it in the hands of the borrower. The increasing availability of book supporting media such as films, records and microprint will further assist and enhance the borrower's pursuit of information and recreation.

Along with these advances must come a new public relations program thoroughly to acquaint the public with the objective, resources and services of the library. The end result, of course, is better educated individuals, capable of adjusting to and taking their place in the complex societies of today and tomorrow.

Because I believe that the need of the individual is so urgent, I feel that these are critical years in library organization. The library is a public trust and I do not believe that Mr. Morebooks and his nation-wide corporation for library service has a rightful place in it. Regional cooperation, I believe, will enable the library to play its essential role in the life of the individual, forming at once a citadel of intellectual strength in a word crying for freedom of thought.

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